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THE BRITISH PARASITIC COPEPODA

BY
THOMAS SCOTT, LL.D., F.L.S.

AND
ANDREW SCOTT, A.L.S.

VOLUME II
COPEPODA PARASITIC ON FISHES

PLATES

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THE AUTHORS
DESIRE, WITH THE MOST SINCERE RESPECT,
TO DEDICATE THIS WORK
TO THE
REV. CANON A. M. NORMAN, M.A.,
D.C.L., LL.D., F.R.S., F.L.S., ETC.,
IN GRATITUDE FOR HIS UNFAILING
KINDNESS AND ASSISTANCE
EXTENDED TO THEM FOR MANY YEARS.



NOTE BY THOMAS SCOTT.

All the figures, unless otherwise described, have been prepared by my son, Andrew Scott, from specimens examined by the authors.

The illustrations have all been engraved by André & Sleigh, Ltd., of Bushey, Watford.

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<i>a.</i> antennules.	<i>o.</i> ovary.
<i>a</i> ¹ . antennæ.	<i>od.</i> oviduct.
<i>an.</i> anus.	<i>oe.</i> œsophagus.
<i>b.</i> median frontal sucker.	<i>os.</i> ovisac.
<i>c.</i> filament duct.	<i>p</i> ⁱ . first pair of feet.
<i>cg.</i> cement gland.	<i>p</i> ⁱⁱ . second pair of feet.
<i>dg.</i> digestive gland.	<i>p</i> ⁱⁱⁱ . third pair of feet.
<i>e.</i> eyes.	<i>p</i> ^{iv} . fourth pair of feet.
<i>f.</i> filament.	<i>p</i> ^v . fifth pair of feet.
<i>g.</i> ganglia.	<i>p</i> ^{vi} . sixth pair of feet.
<i>i.</i> intestine.	<i>rs.</i> receptaculum seminis.
<i>ls.</i> lateral frontal sucker.	<i>rt.</i> rectum.
<i>lens.</i> lens.	<i>rtn.</i> retina.
<i>m.</i> mouth.	<i>s.</i> stomach.
<i>md.</i> mandible.	<i>sbq.</i> sub-œsophageal ganglion.
<i>mx.</i> first maxilla.	<i>spg.</i> supra-œsophageal ganglion.
<i>mx</i> ¹ . second maxilla.	<i>sp.</i> spermatophore.
<i>mxp.</i> first maxilliped.	<i>t.</i> testis.
<i>mxp</i> ¹ . second maxilliped.	<i>u.</i> vulva.
<i>n.</i> nerves.	<i>vd.</i> vas deferens.

NOS. 1-13, NERVES, AS FOLLOWS:—

1. optic.	9. first maxillipeds.
2. antennules.	10. second maxillipeds.
3. antennæ.	11. first feet and stomach muscles.
4. mandibles.	12. second feet and posterior cephalic muscles.
5. lateral frontal margins.	13. third feet, fourth feet, fifth feet, genital segment, and abdomen.
6. first maxillæ.	
7. second maxillæ.	
8. lateral cephalic muscles.	

Plate 1

PLATE II.

FIGS.

1-5. *Ergasilus nanus* P. J. van Beneden, ♀. (p. 34.)

1. Antennule.
2. Foot of first pair.
3. Foot of third pair.
4. Foot of fourth pair.
5. Abdomen.

6-9. *Bomolochus soleæ* Claus, ♀. (p. 36.)

6. Mandible.
7. First maxilliped.
8. Foot of second pair.
9. Foot of fourth pair.

(Figures much enlarged.)

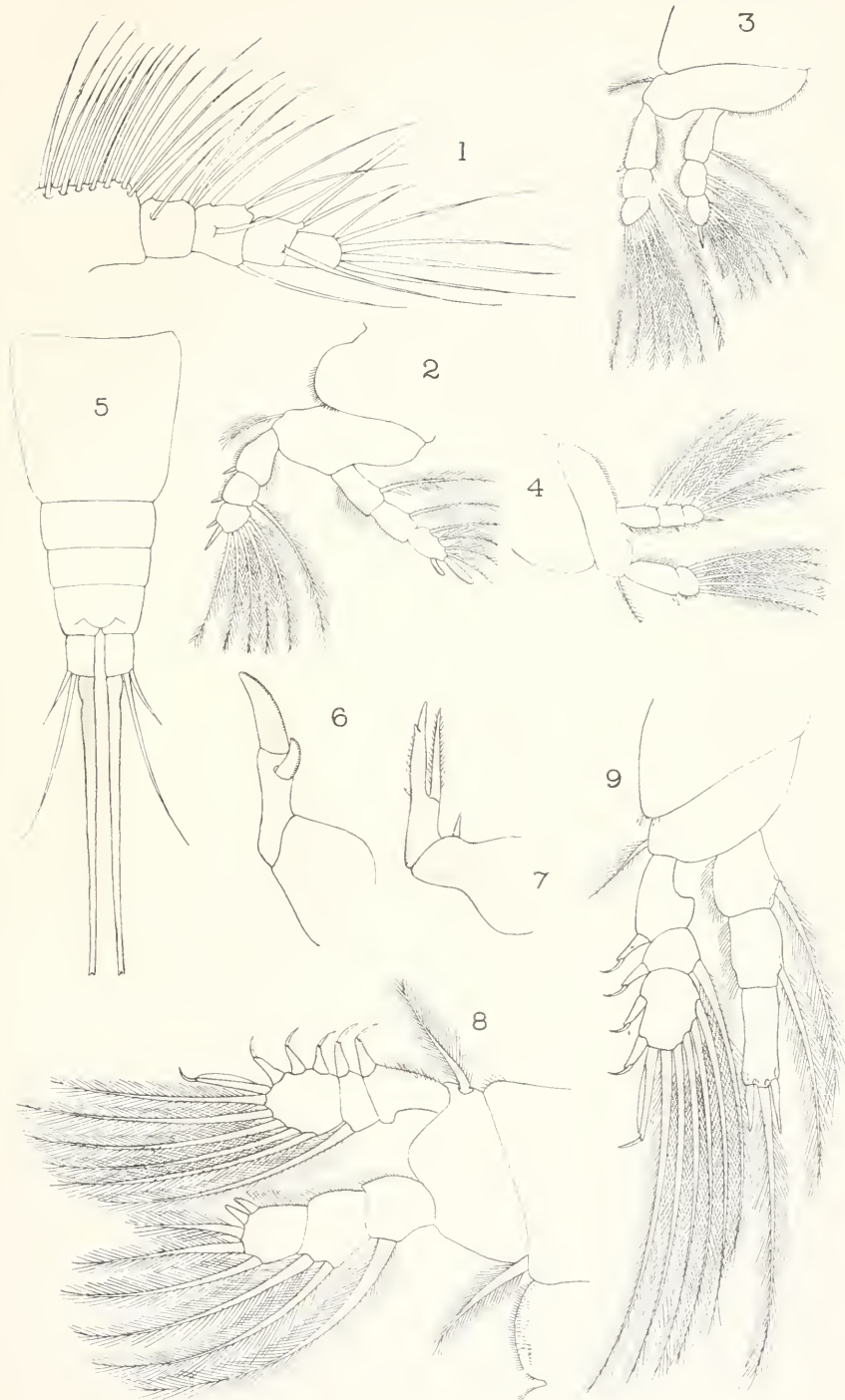


Plate 3



PLATE III.

FIGS.

1-4. *Bomolochus soleæ* Claus, ♀. (p. 36.)

1. Antennule.

2. Maxilla.

3. Second maxilliped.

4. Foot of first pair.

5-7. *Bomolochus onosi* T. Scott. (p. 39.)

5. Antennule, ♀.

6. Second maxilliped, ♀.

7. Second maxilliped, ♂.

8, 9. *Bomolochus zeugopteri* T. Scott, ♀. (p. 40.)

8. Antennule.

9. Second maxilliped.

(Figures much enlarged.)

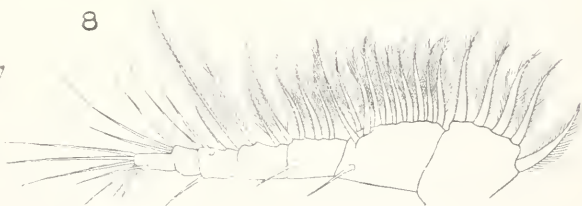
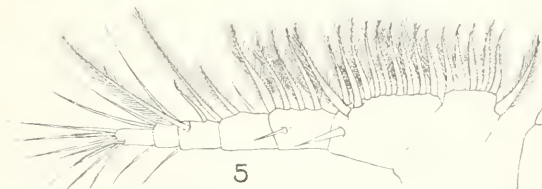
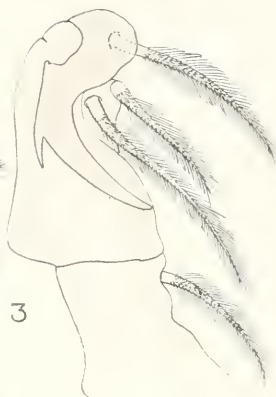
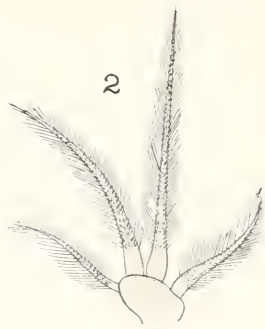
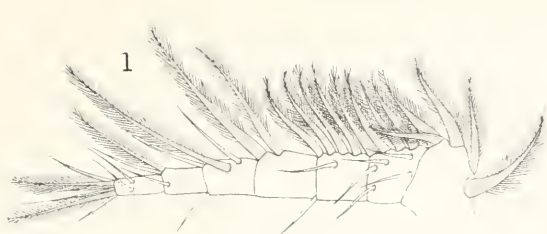


PLATE IV.

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1, 2. *Caligus minimus* Otto. (p. 46.)

1. Dorsal view, ♀, × 11.

2. Dorsal view, ♂, × 11.

3-8. *Caligus rapax* M. Edwards. (p. 48.)

3. Early "chalimus" stage attached to fin-ray of a young cod, × 54.

4. Late "chalimus" stage attached to tail of a young lumpsucker, × 15.

5. Mature part of a frontal plate, shewing lateral sucker (*lunula*).

6. Sternal fork, ♀.

7. Second maxilliped, ♀.

8. Foot of fourth pair, ♀.

(Figures 5-8 much enlarged.)

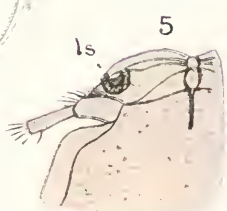
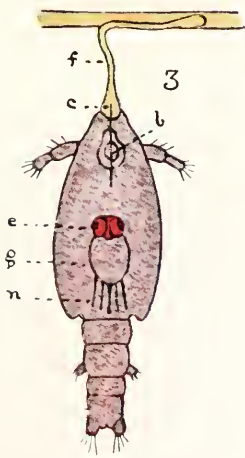
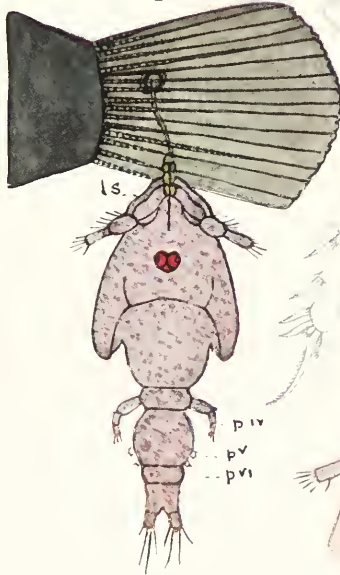
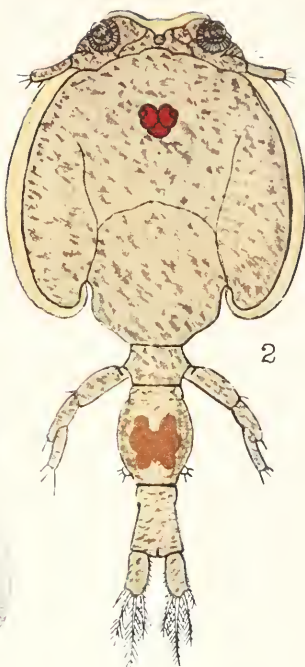
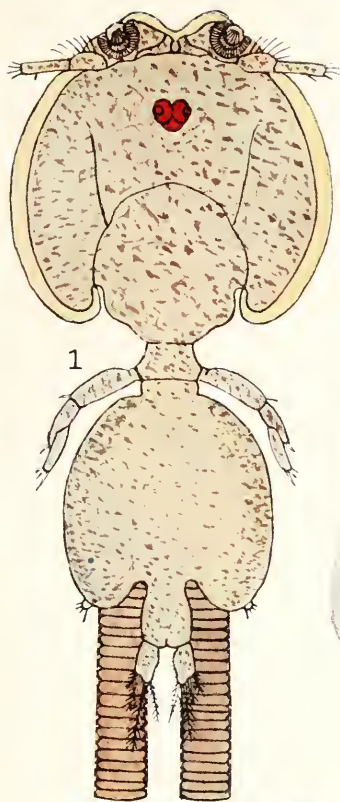


Plate 5

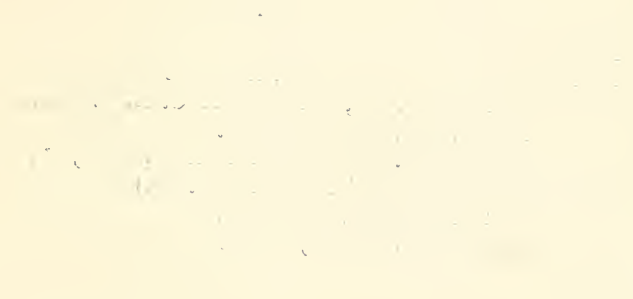


PLATE V.

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5. Dorsal view, ♂, × 21.

PLATE V

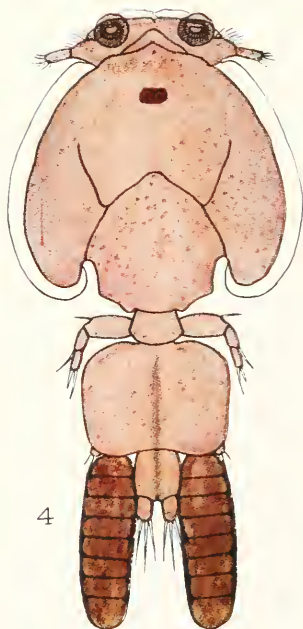
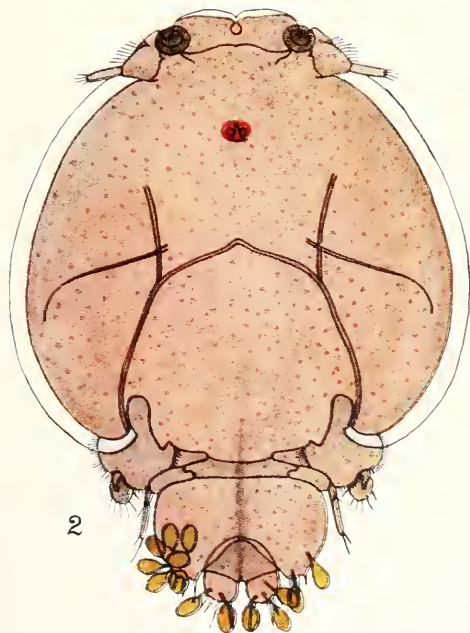
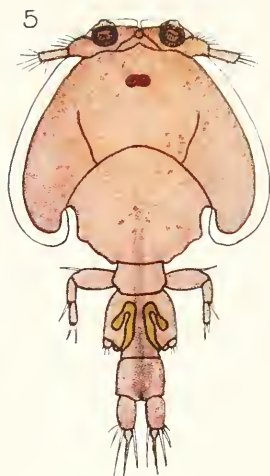
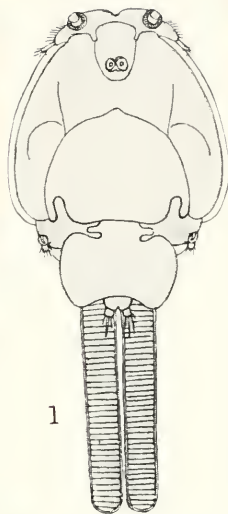
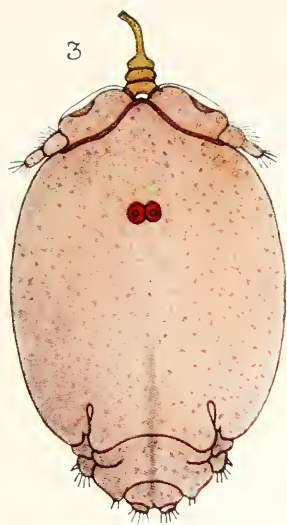


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 3. Dorsal view, ♀, $\times 16$.
- 4, 5. *Lepeophtheirus hippoglossi* (Kröyer). (p. 67.)
 4. Dorsal view, ♀, $\times 5$.
 5. Dorsal view, ♂, $\times 7\cdot5$.



1



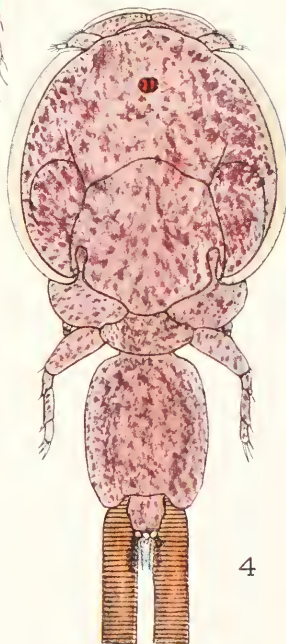
2



3



5



4

Plate 7

PLATE VII.

FIGS.

1. *Caligus zeii* Norman & T. Scott. (p. 54.)
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- 2, 3. *Caligus pelamydis* Kröyer. (p. 57.)
 2. Dorsal view, ♀, $\times 22\cdot5$
 3. Sternal fork, ♀ (enlarged).

PLATE VII

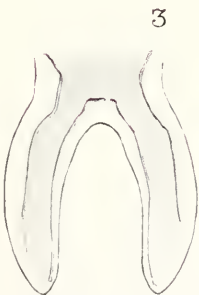
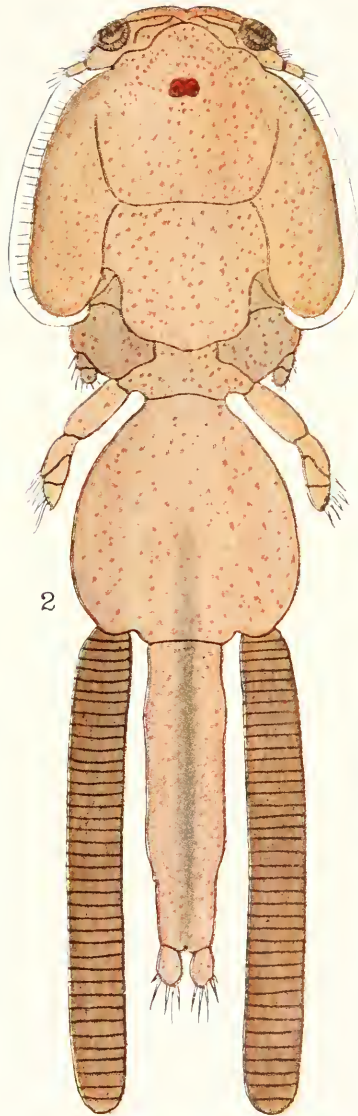
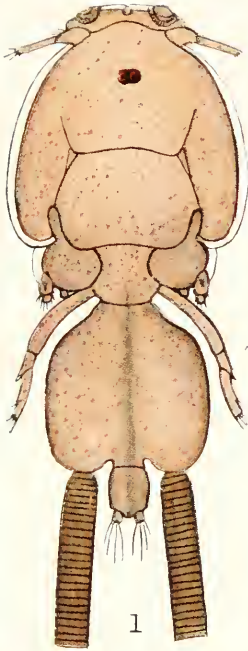


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 2. Dorsal view, ♀, × 8. (After Kröyer.)
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 4. Antenna.
 5. Sternal fork.
 6. First maxilliped.
 7. Second maxilliped.
 8. Foot of fourth pair.
 9. Urosome, ♂.
- 10, 11. *Caligus brevicaudatus* A. Scott, ♀. (p. 56.)
 10. Second maxilliped, ♀.
 11. Foot of fourth pair, ♀.

(Figures 3-11 much enlarged.)

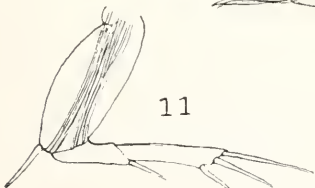
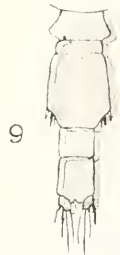
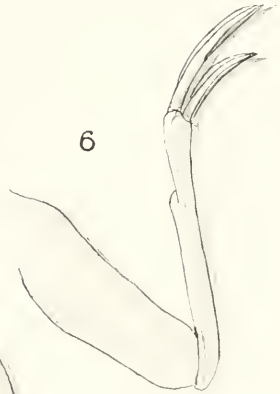
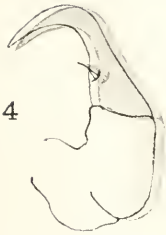
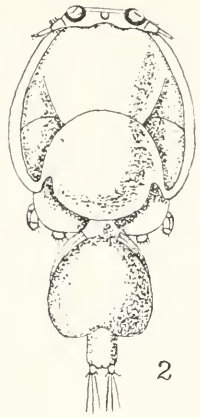
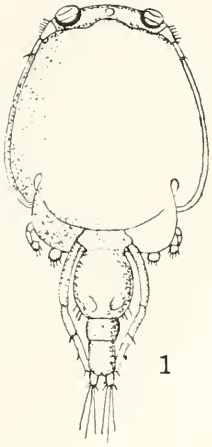


Plate 9

PLATE IX.

FIGS.

1-5. *Caligus pelamydis* Kröyer, ♀. (p. 57.)

1. Antennule.
2. Antenna.
3. First maxilliped.
4. Second maxilliped.
5. Foot of fourth pair.

6-9. *Pseudocaligus brevipedes* (Bassett-Smith). (p. 61.)

6. Sternal fork, ♀.
7. Sternal fork, ♂.
8. Second maxilliped, ♀.
9. Foot of fourth pair, ♀.

(Figures much enlarged.)

PLATE IX

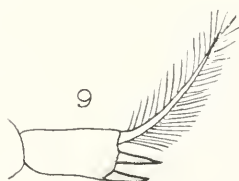
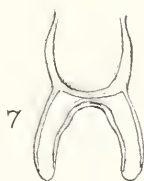
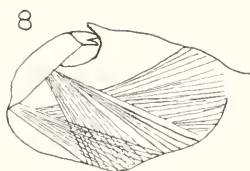
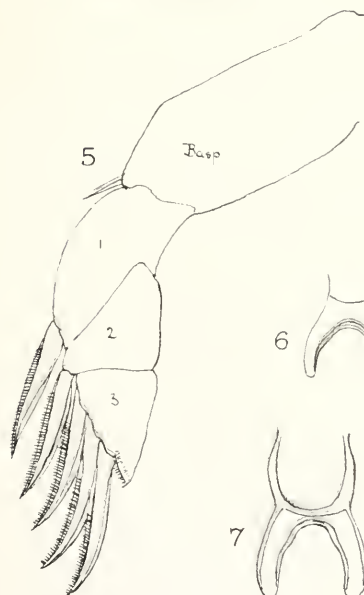
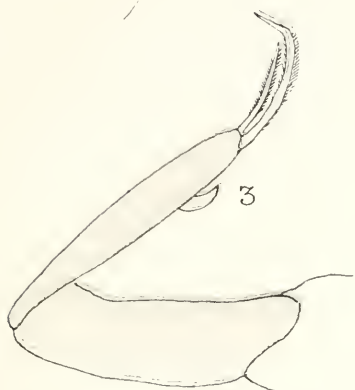
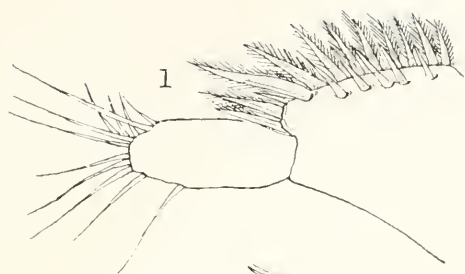
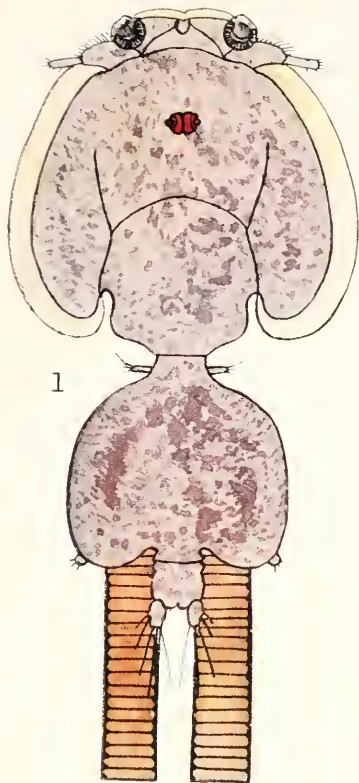


Plate 10

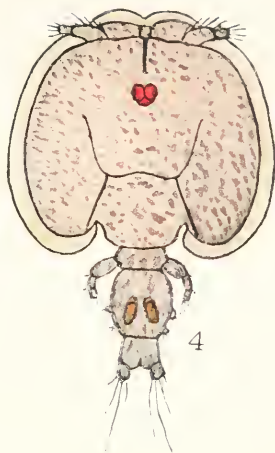
PLATE X.

FIGS.

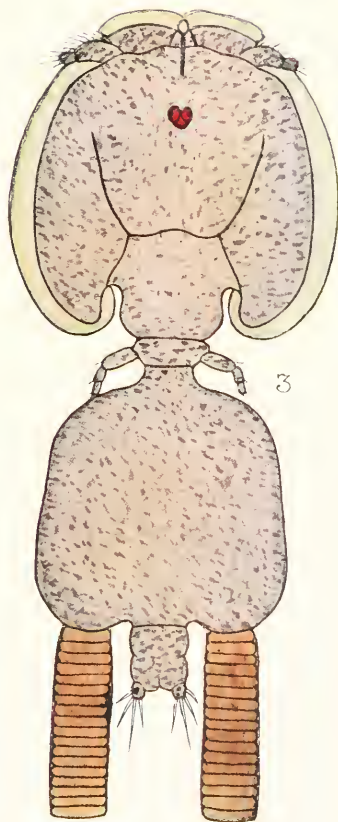
- 1, 2. *Pseudocaligus brevipedes* (Bassett-Smith). (p. 61.)
 1. Dorsal view, ♀, × 22.
 2. Dorsal view, ♂, × 22.
- 3, 4. *Lepeophtheirus pectoralis* (O. F. Müller). (p. 64.)
 3. Dorsal view, ♀, × 17.
 4. Dorsal view, ♂, × 17.



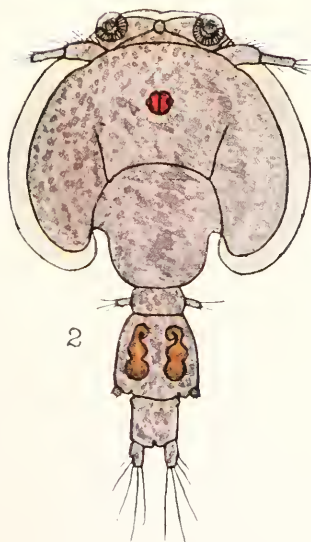
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Plate 11

PLATE XI.

FIGS.

- 1-6. *Sciænophilus tenuis* P. J. van Beneden, ♀. (p. 63.)
1. Dorsal view (natural size).
 2. Dorsal view (enlarged).
 3. Dorsal view (cephalothorax only).
 4. Ventral view (cephalothorax, right half only).
 5. Mandible.
 6. Caudal rami.

(After P. J. van Beneden.)

PLATE XI

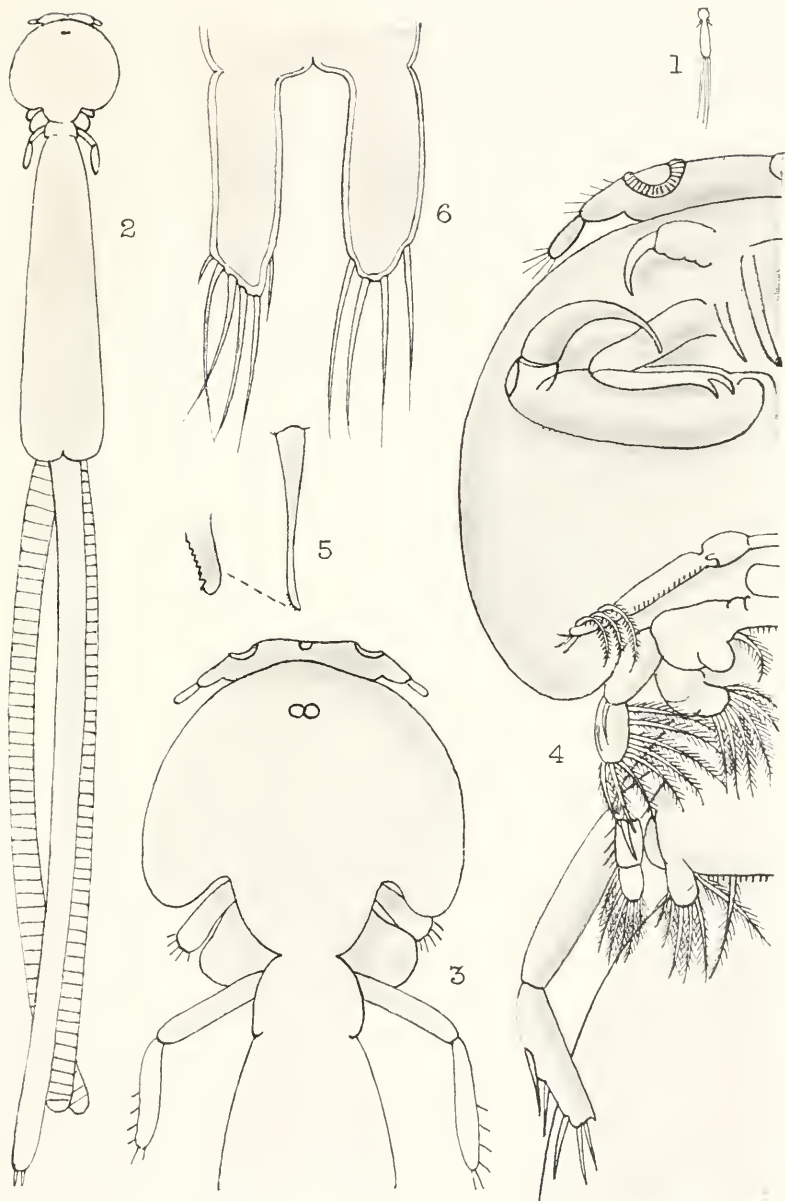


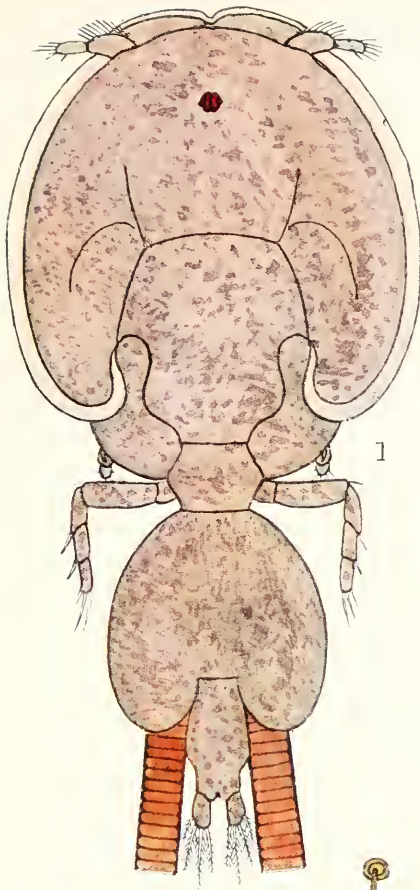
Plate 12

PLATE XII.

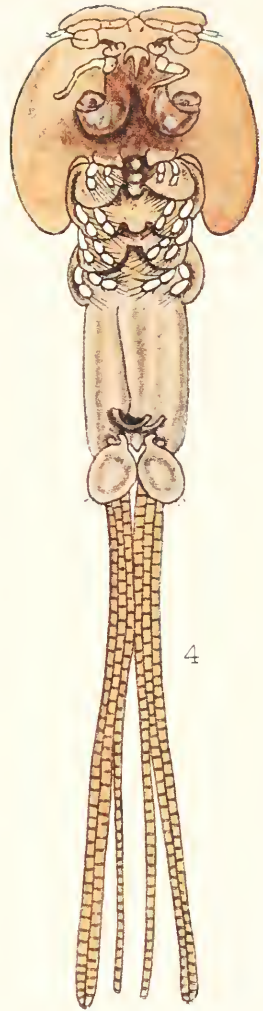
FIGS.

1. *Lepeophtheirus nordmanni* (M. Edwards). (p. 66.)
 1. Dorsal view, ♀, × 9.
- 2, 3. *Lepeophtheirus pectoralis* (O. F. Müller). (p. 64.)
 2. Newly hatched nauplius, × 52.
 3. "Chalimus" stage, × 26.
- 4, 5. *Demoleus paradoxus* (Otto). (p. 79.)
 4. Ventral view, ♀. (After Otto.)
 5. Ventral view, ♂. (After Otto.)

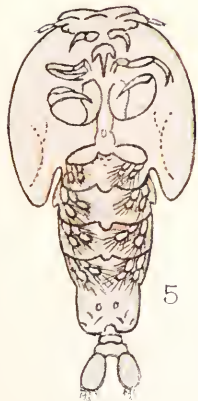
(Figures 4 and 5 enlarged.)



1



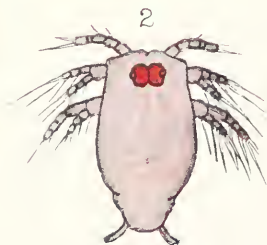
4



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Plate 13

PLATE XIII.

FIGS.

1-4. *Lepeophtheirus pectoralis* (O. F. Müller), ♀. (pp. 9-18 and 64.)

1. Ventral view, shewing the various appendages and their muscles, $\times 17$.
2. Dorsal view, shewing the dorsal muscles, $\times 17$.
3. Ventral view, shewing the alimentary canal and digestive glands, $\times 17$.
4. Ventral view, shewing the nervous system *in situ*, $\times 17$.

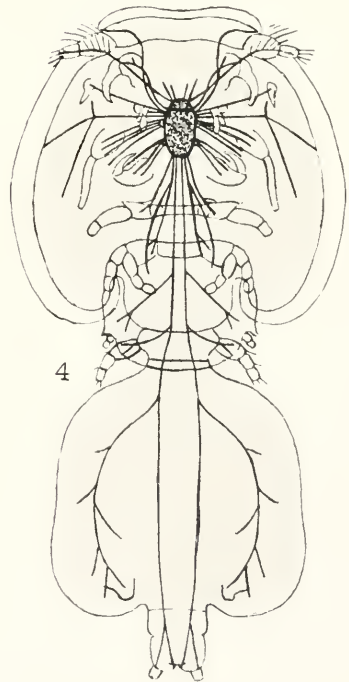
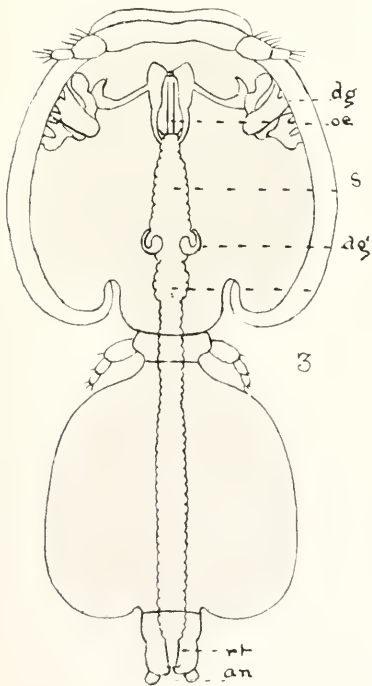
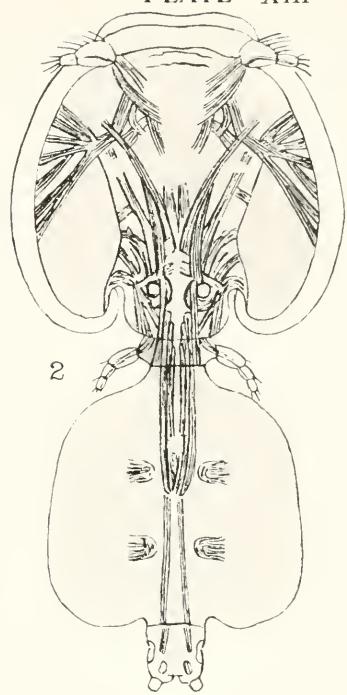
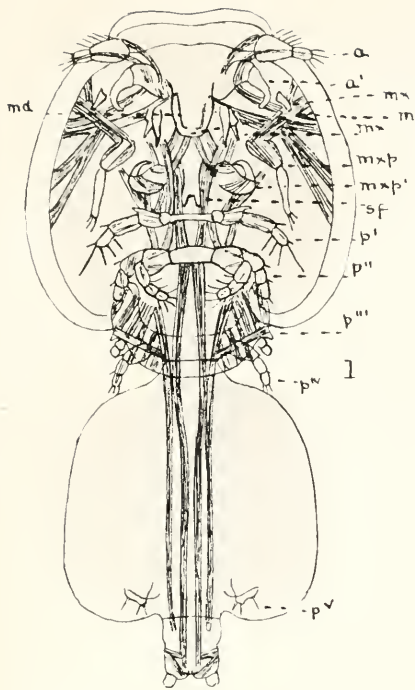


Plate 14

PLATE XIV.

FIGS.

- 1-10. *Lepeophtheirus pectoralis* (O. F. Müller). (pp. 9-18 and 64.)
1. Ventral view, shewing the reproductive organs, ♀, × 17.
 2. Genital segment and abdomen, ♀, immature.
 3. Ventral view, shewing the reproductive organs, ♂, × 17.
 4. Longitudinal section of the ovary.
 5. Transverse section through genital segment, ♀, mature.
 6. Transverse section through genital segment, ♂, mature.
 7. Left anterior digestive gland.
 8. Mouth from the anterior surface, shewing the mandibles *in situ*, and the ducts from the right and left anterior digestive glands.
 9. Spermatophores detached from the genital openings of a female.
 10. Median longitudinal section of the ganglia, shewing the "pinhole" œsophagus passing through between the supra- and sub-œsophageal parts.

(Figures much enlarged.)

PLATE XIV

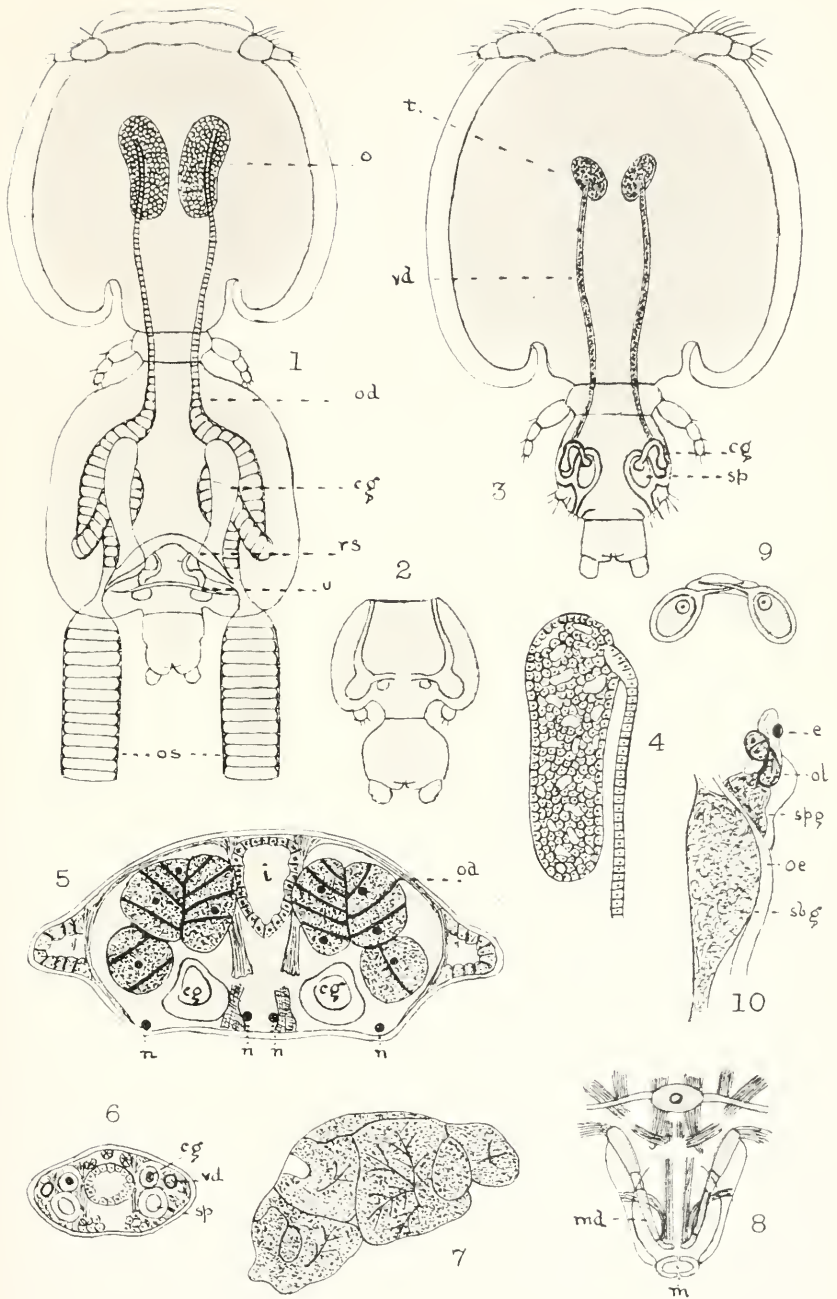


Plate 15

PLATE XV.

FIGS.

1-9. *Lepeophtheirus pectoralis* (O. F. Müller), ♀. (pp. 9-18 and 46.)

1. Nearly median longitudinal section.
2. Part of transverse section of the intestine.
3. Horizontal section of the supra-oesophageal ganglion, shewing the crossing of the fibres of the optic nerves.
4. Transverse section of the eyes.
5. One of the antennules, shewing the nerve endings.
6. Transverse section in the region of the supra- and sub-oesophageal ganglia.
7. Transverse section in the region of the eyes.
8. Transverse section in the region of the second maxillipeds.
9. The nervous system from the ventral aspect.

(Figures much enlarged.)

PLATE XV

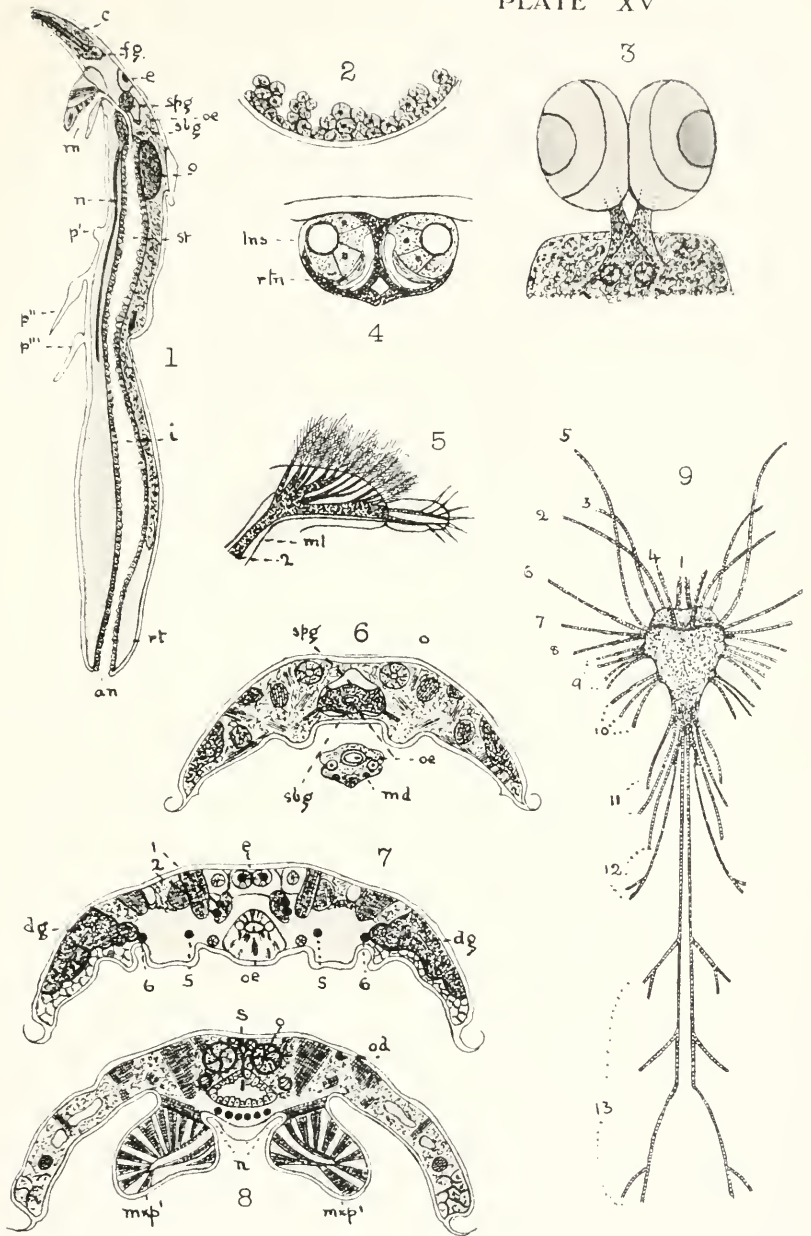


PLATE XVI.

FIGS.

- 1-3. *Lepeophtheirus pectoralis* (O. F. Müller), ♀. (p. 64.)
1. Sternal fork.
2. Second maxilliped.
3. Foot of fourth pair.
- 4-11. *Lepeophtheirus nordmanni* (M. Edwards), ♀ & ♂. (p. 66.)
4. ♂ Dorsal view. (This figure after C. B. Wilson.)
5. ♀ Antenna.
6. ♀ Sternal fork.
7. ♀ Second maxilliped.
8. ♀ Foot of fourth pair.
9. ♀ Sternal fork.
10. ♀ Second maxilliped.
11. ♀ Foot of fourth pair.

(The last three figures are from a second specimen.)

PLATE XVI

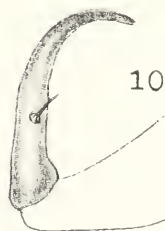
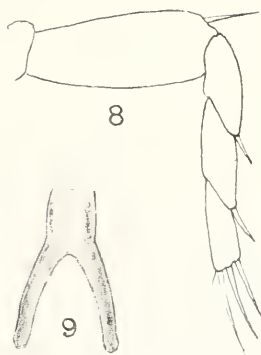
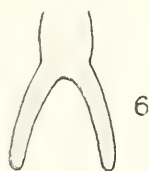
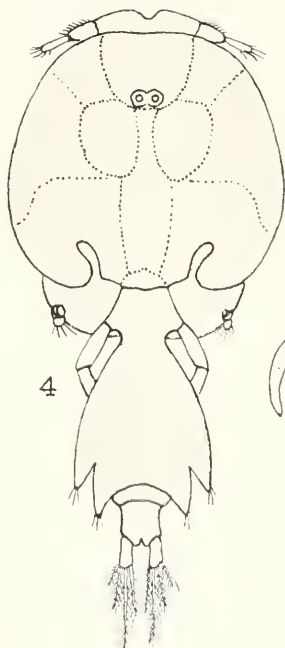
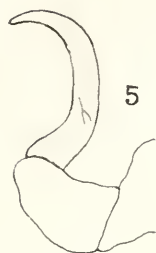
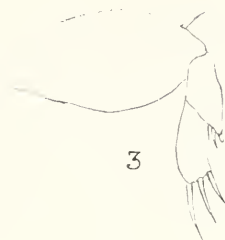


PLATE XVII.

FIGS.

1. *Caligus diaphanus* Nordmann. (p. 60.)
 1. Dorsal view, ♀, × 13.
2. *Lepeophtheirus hippoglossi* (Kröyer). (p. 67.)
 2. Dorsal view, ♀ immature.
3. *Lepeophtheirus thompsoni* Baird. (p. 69.)
 3. Dorsal view, ♀, × 8·75.
4. *Lepeophtheirus salmonis* (Kröyer). (p. 71.)
 4. Dorsal view, ♀, × 4.
- 5, 6. *Lepeophtheirus pollachii* Bassett-Smith. (p. 73.)
 5. Dorsal view, ♀, × 10.
 6. Dorsal view, ♂, × 13.

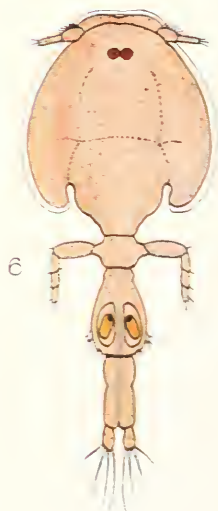
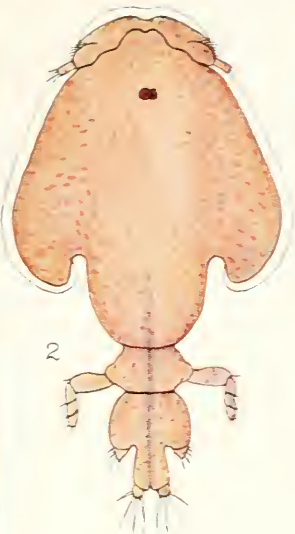
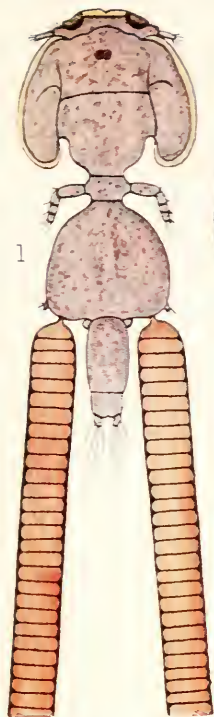




PLATE XVIII.

FIGS.

- 1-3. *Caligus centrodoni* Baird, ♀. (p. 50.)
1. Sternal fork.
2. Second maxilliped.
3. Foot of fourth pair.
- 4, 5. *Caligus labracis* T. Scott, ♀. (p. 53.)
4. Sternal fork.
5. Foot of fourth pair.
- 6, 7. *Caligus diaphanus* Nordmann, ♀. (p. 60.)
6. Second maxilliped.
7. Foot of fourth pair.
- 8-10. *Lepeophtheirus hippoglossi* (Kröyer), ♀. (p. 67.)
8. Sternal fork.
9. First maxilliped.
10. Second maxilliped.
- 11, 12. *Lepeophtheirus salmonis* (Kröyer), ♀. (p. 71.)
11. Sternal fork.
12. Foot of fourth pair.
- 13-15. *Lepeophtheirus pollachii* Bassett-Smith. ♀. (p. 73.)
13. First maxilliped.
14. Second maxilliped.
15. Foot of fourth pair.
- 16-19. *Lepeophtheirus sturionis* (Kröyer), ♀. (p. 74.)
16. Sternal fork.
17. Second maxilliped.
18. Foot of fourth pair.
19. Furcal joints.

(Figures much enlarged.)

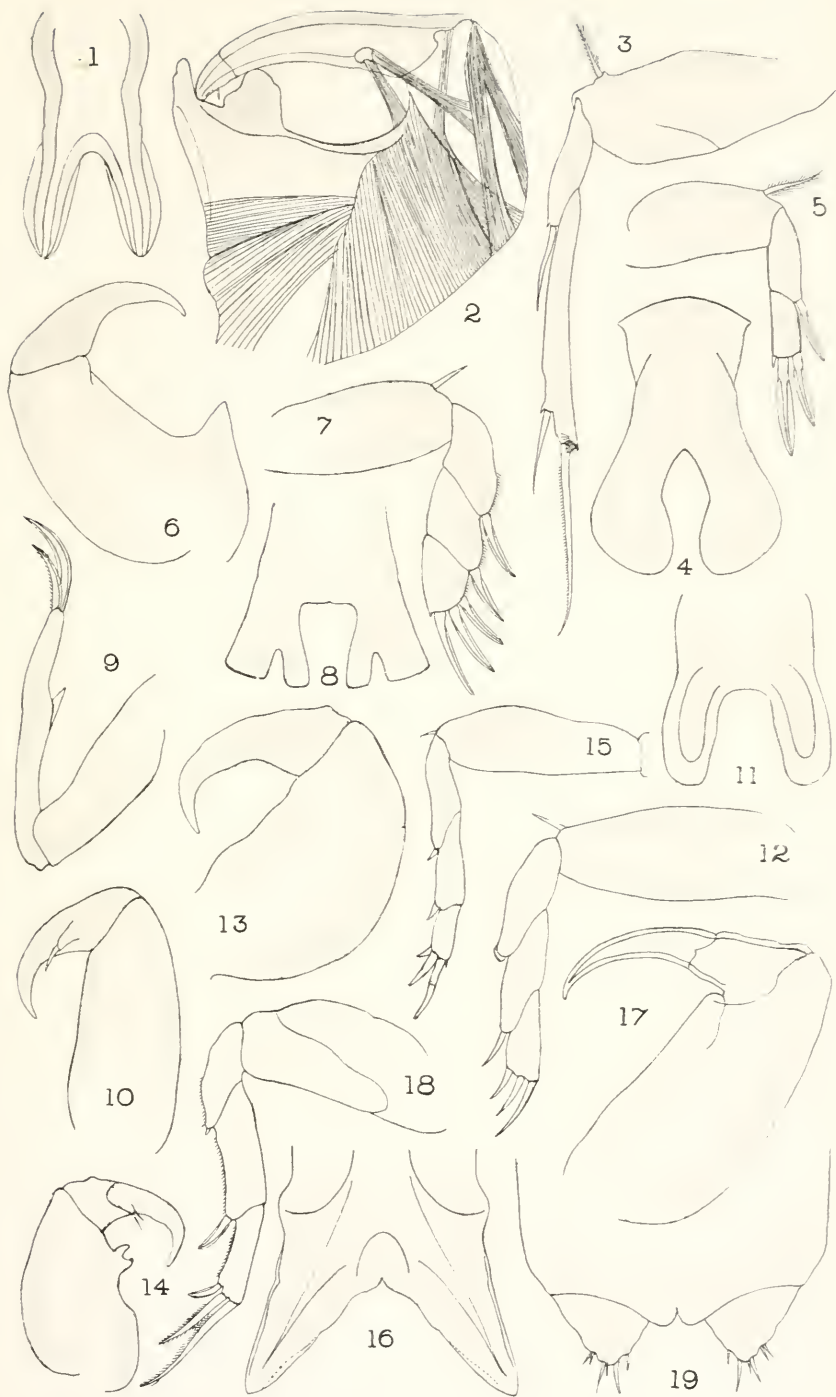


Plate 19

PLATE XIX.

FIGS.

- 1-9. *Lütkenia asterodermi* Claus, ♀. (p. 76.)
1. Antennule.
2. Antenna.
3. First maxilliped.
4. Second maxilliped.
5. Foot of first pair.
6. Foot of second pair.
7. Foot of third pair.
8. Foot of fourth pair.
9. Abdomen and furcal joints.
10. *Elytrophora brachyptera* Gerstaecker. (p. 83.)
10. Foot of second pair, ♀.
11-18. *Phyllothreus cornutus* (M. Edwards), ♀. (p. 92.)
11. Antennule.
12. Antenna.
13. First maxilliped.
14. Second maxilliped.
15. Foot of first pair.
16. Foot of second pair.
17. Foot of third pair.
18. Foot of fourth pair.

(Figures much enlarged.)

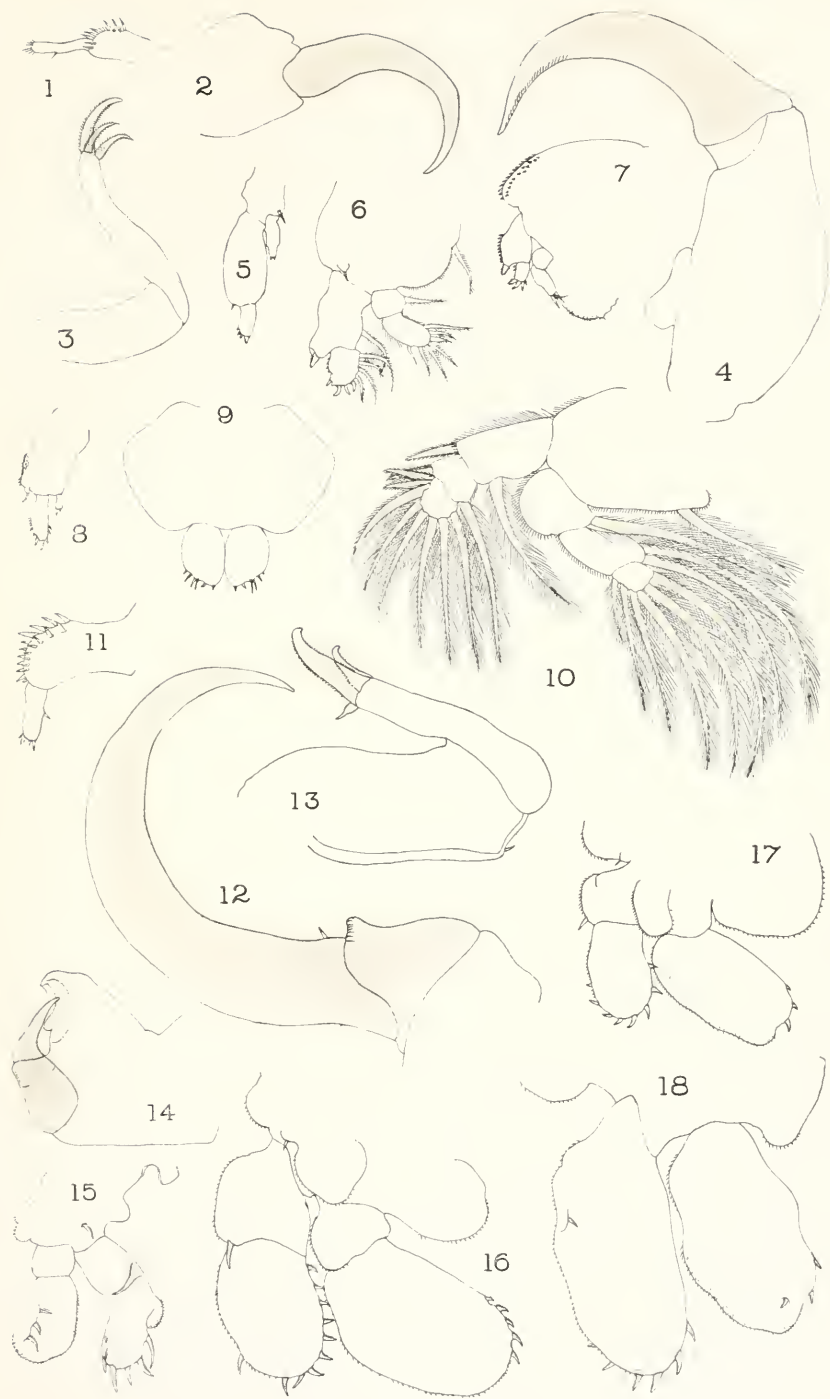


PLATE XX.

FIGS.

1-8. *Nogaus ambiguus* T. Scott, ♂. (p. 78.)

1. Dorsal view, $\times 13$.

2. Antennule.

3. First maxilliped.

4. Second maxilliped.

5. Foot of first pair.

6. Foot of second pair.

7. Foot of third pair.

8. Foot of fourth pair.

9. *Chondracanthus annulatus* Olsson. (p. 169.)

9. Lateral view, ♂, $\times 50$.

10. *Chondracanthus merluccii* (Holten). (p. 180.)

10. Lateral view, ♂, $\times 115$.

(Figures 2-8 much enlarged.)

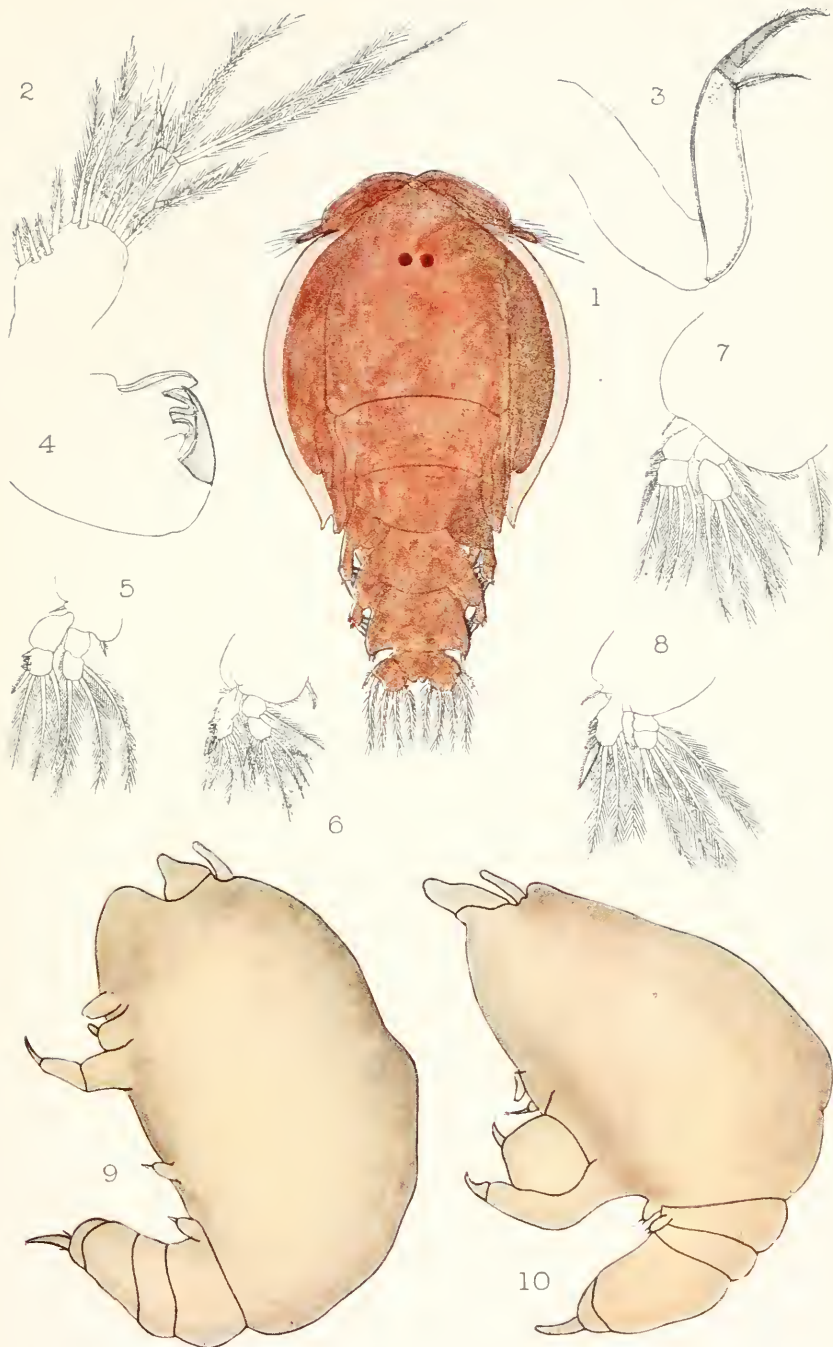


PLATE XXI.

FIGS.

1. *Lepeophtheirus sturionis* (Kröyer). (p. 74.)
 1. Dorsal view, ♀, × 6·6.
2. *Pandarus bicolor* Leach. (p. 95.)
 2. Dorsal view, ♂ (juv.) = *Nogagus latus* T. Scott, × 15.
- 3, 4. *Cecrops latreillii* Leach. (p. 98.)
 3. Dorsal view, ♀, × 2.
 4. Dorsal view, ♂, × 2.
5. *Orthagoriscicola muricata* (Kröyer). (p. 100.)
 5. Dorsal view, ♀, × 2·5.

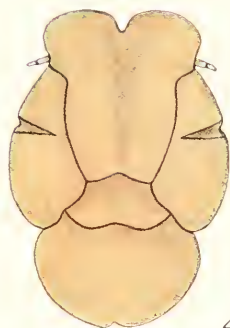
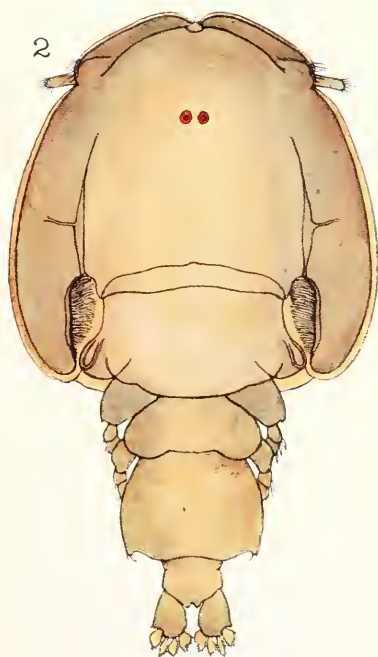
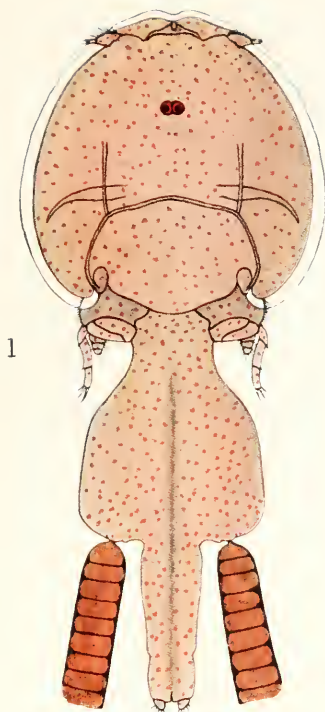


Plate 22

PLATE XXII.

FIGS.

- 1, 2. *Trebius caudatus* Kröyer. (p. 81.)
 1. Dorsal view, ♀, $\times 6\cdot6$.
 2. Dorsal view, ♂, $\times 15$.
3. *Dinemoura producta* (O. F. Müller). (p. 86.)
 3. Dorsal view, ♀, $\times 3\cdot3$.
4. *Echthrogaleus coleoptratus* (Guérin). (p. 89.)
 4. Dorsal view, ♀, $\times 4$.
- 5, 6. *Pandarus bicolor* Leach. (p. 95.)
 5. Dorsal view, ♀, $\times 5$.
 6. Dorsal view, ♂, $\times 10$.

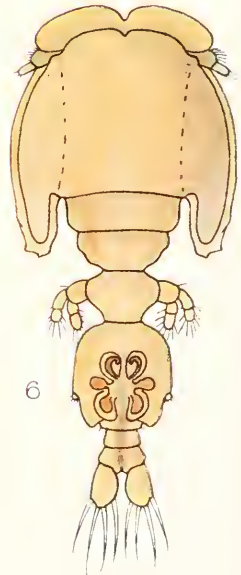
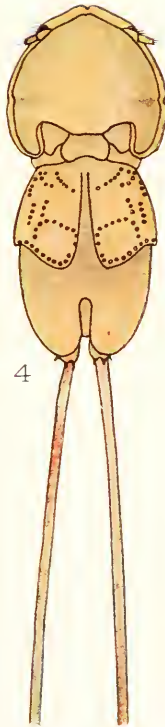
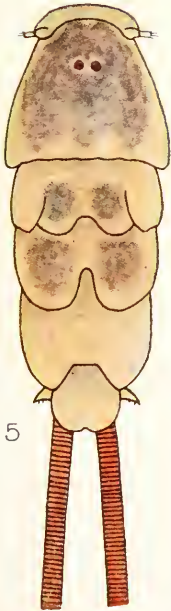
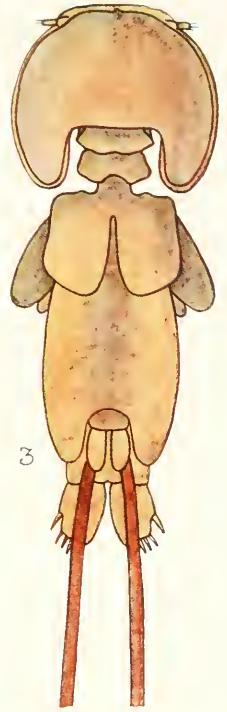
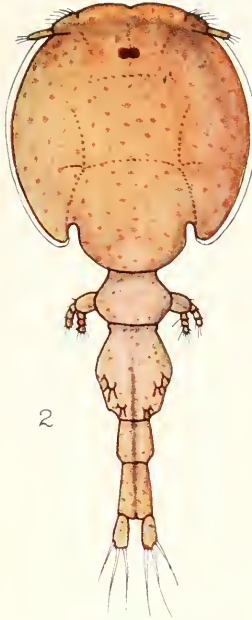


PLATE XXIII.

FIGS.

- 1, 2. *Elytrophora brachyptera* Gerstaecker. (p. 83.)
 1. Dorsal view, ♀, $\times 8$.
 2. Dorsal view, ♂, $\times 8$.
3. *Phyllothreus cornutus* (M. Edwards). (p. 92.)
 3. Dorsal view, ♀, $\times 4\cdot5$.
4. *Lütkenia asterodermi* Claus. (p. 76.)
 4. Dorsal view, ♀ (enlarged).
- 5, 6. *Anthosoma crassum* (Abildgaard). (p. 108.)
 5. Dorsal view, ♀, $\times 3$.
 6. Ventral view, ♀, $\times 3$.

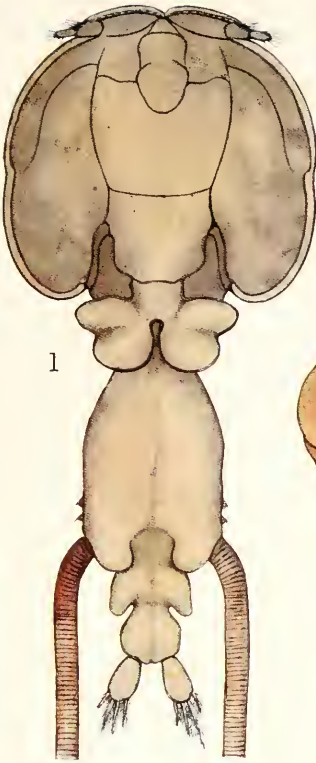
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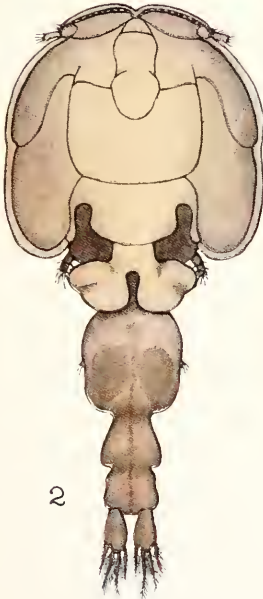
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6



PLATE XXIV.

FIGS.

1, 2. *Caligus curtus* O. F. Müller. (p. 45.)

1. Dorsal view, ♀, $\times 8$.

2. Dorsal view, ♂, $\times 6\cdot5$.

3, 4. *Philorthragoriscus serratus* (Kröyer). (p. 104.)

3. Dorsal view, ♀, $\times 12\cdot5$.

4. Dorsal view, ♂, $\times 20$.

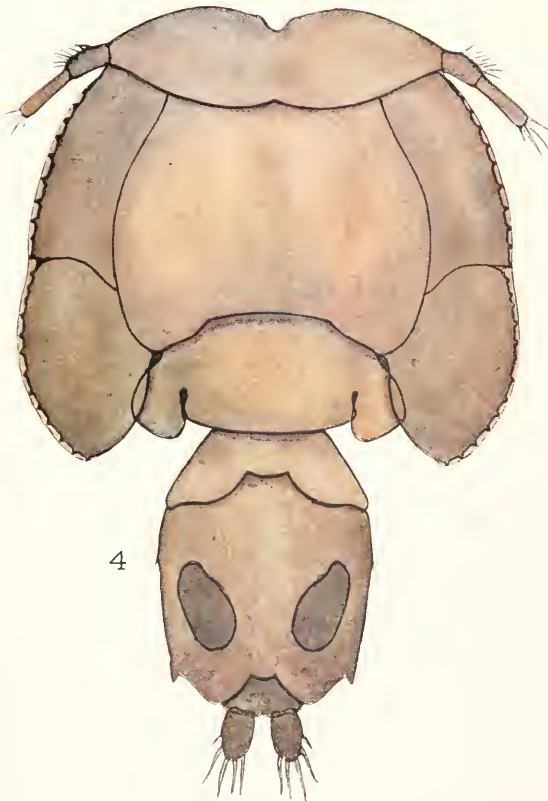
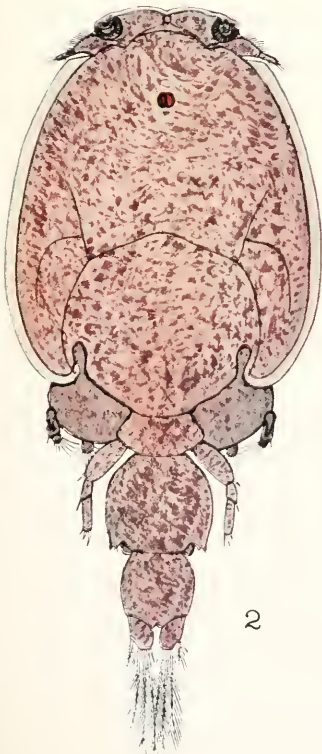
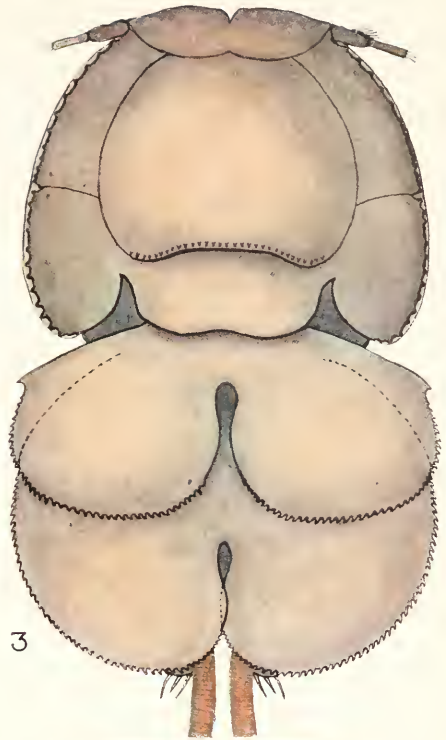
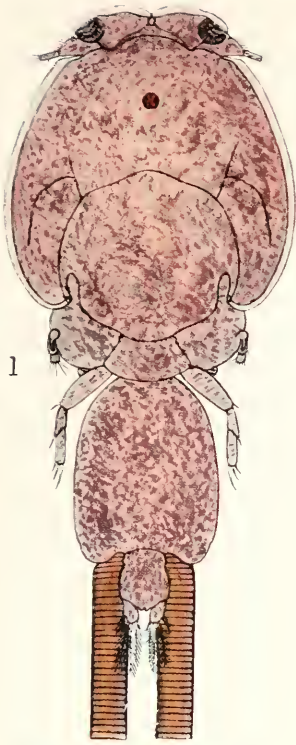


PLATE XXV.

FIGS.

- 1-6. *Thersitina gasterostei* (Pagenstecher), ♀. (p. 42.)
1. Antennule.
2. Antenna.
3. Second maxilliped.
4. Foot of first pair.
5. Foot of fourth pair.
6. Abdomen and furcal joints.
7-9. *Caligus curtus* O. F. Müller, ♀. (p. 45.)
7. Sternal fork.
8. Second maxilliped.
9. Foot of fourth pair.
10. *Lepeophtheirus thompsoni* Baird. (p. 69.)
10. Sternal fork, ♀.
11-16. *Caligus minimus* Otto, ♀ & ♂ (p. 46.)
11. Antennule, ♀.
12. Sternal fork, ♀.
13. Sternal fork, ♂.
14. Second maxilliped, ♀.
15. Foot of fourth pair, ♀.
16. Second maxilliped, ♂.

(Figures much enlarged.)

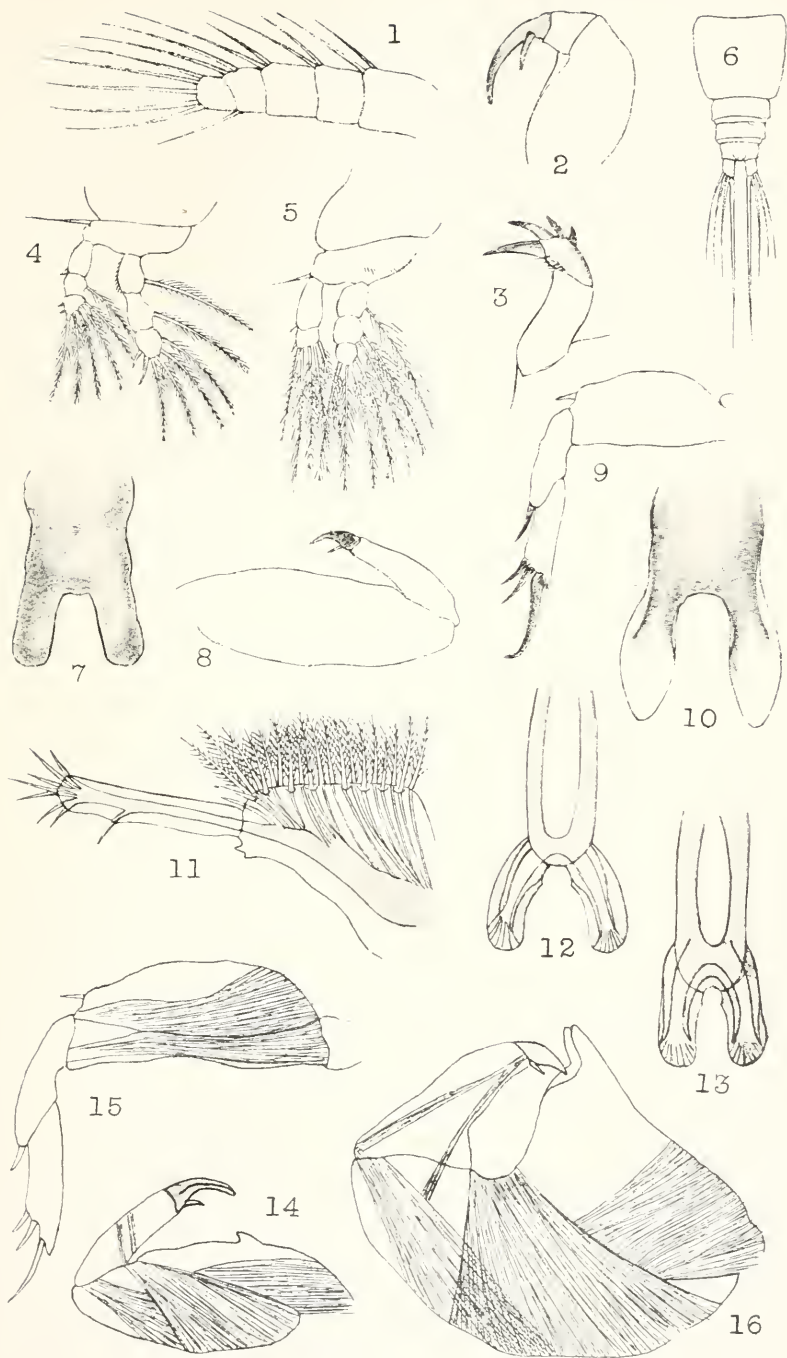


PLATE XXVI.

FIGS.

- 1-3. *Dinemoura producta* (O. F. Müller), ♀ . (p. 86.)
1. Foot of second pair.
2. Foot of fourth pair.
3. Fifth foot.
- 4-19. *Pandarus bicolor* Leach, ♀ & ♂ . (p. 95.)
4. ♀ Antennule.
5. Antenna.
6. Maxilla.
7. First maxilliped.
8. Second maxilliped.
9. Foot of first pair.
10. Foot of second pair.
11. Foot of third pair.
12. Foot of fourth pair.
13. ♂ Antennule.
14. Antenna.
15. Maxilla.
16. First maxilliped.
17. Second maxilliped.
18. Foot of first pair.
19. Foot of second pair.

(Figures much enlarged.)

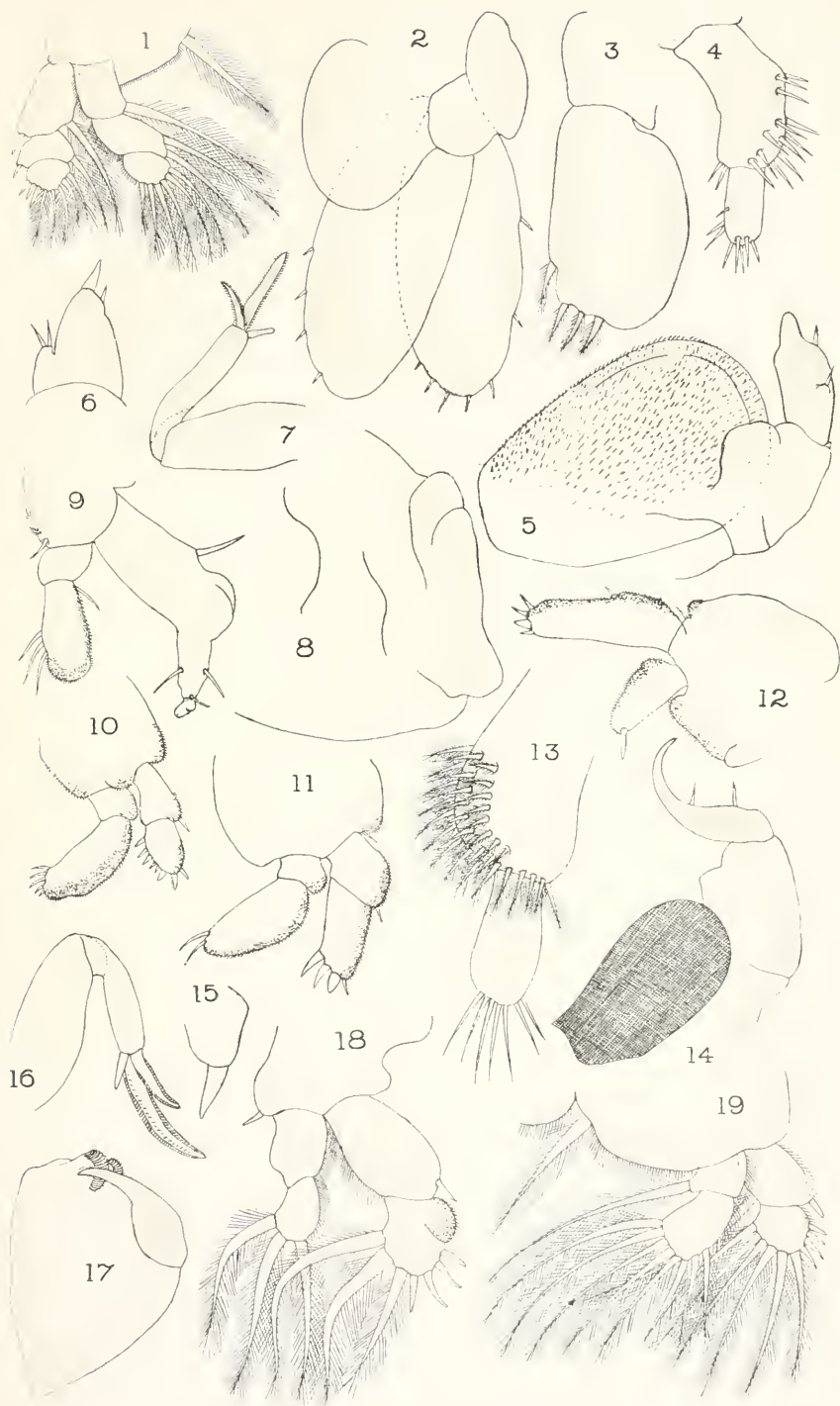




PLATE XXVII.

FIGS.

- 1-8. *Dinemoura producta* (O. F. Müller), ♀. (p. 86.)
1. Antennule.
2. Antenna.
3. Mandible.
4. Maxilla.
5. First maxilliped.
6. Second maxilliped.
7. Foot of first pair.
8. Foot of third pair.
9, 10. *Cecrops latreillii* Leach, ♀. (p. 98.)
9. Antenna.
10. First maxilliped.
11-24. *Philorthrageriscus serratus* (Kröyer), ♀ & ♂. (p. 104.)
11. ♀ Antennule.
12. Antenna.
13. Mandible.
14. Maxilla.
15. First maxilliped.
16. Second maxilliped.
17. Foot of first pair.
18. Foot of third pair.
19. Foot of fourth pair.
20. Abdomen and furcal joints.
21. ♂ Antenna.
22. Maxilla.
23. Second maxilliped.
24. Foot of second pair.

(Figures much enlarged.)

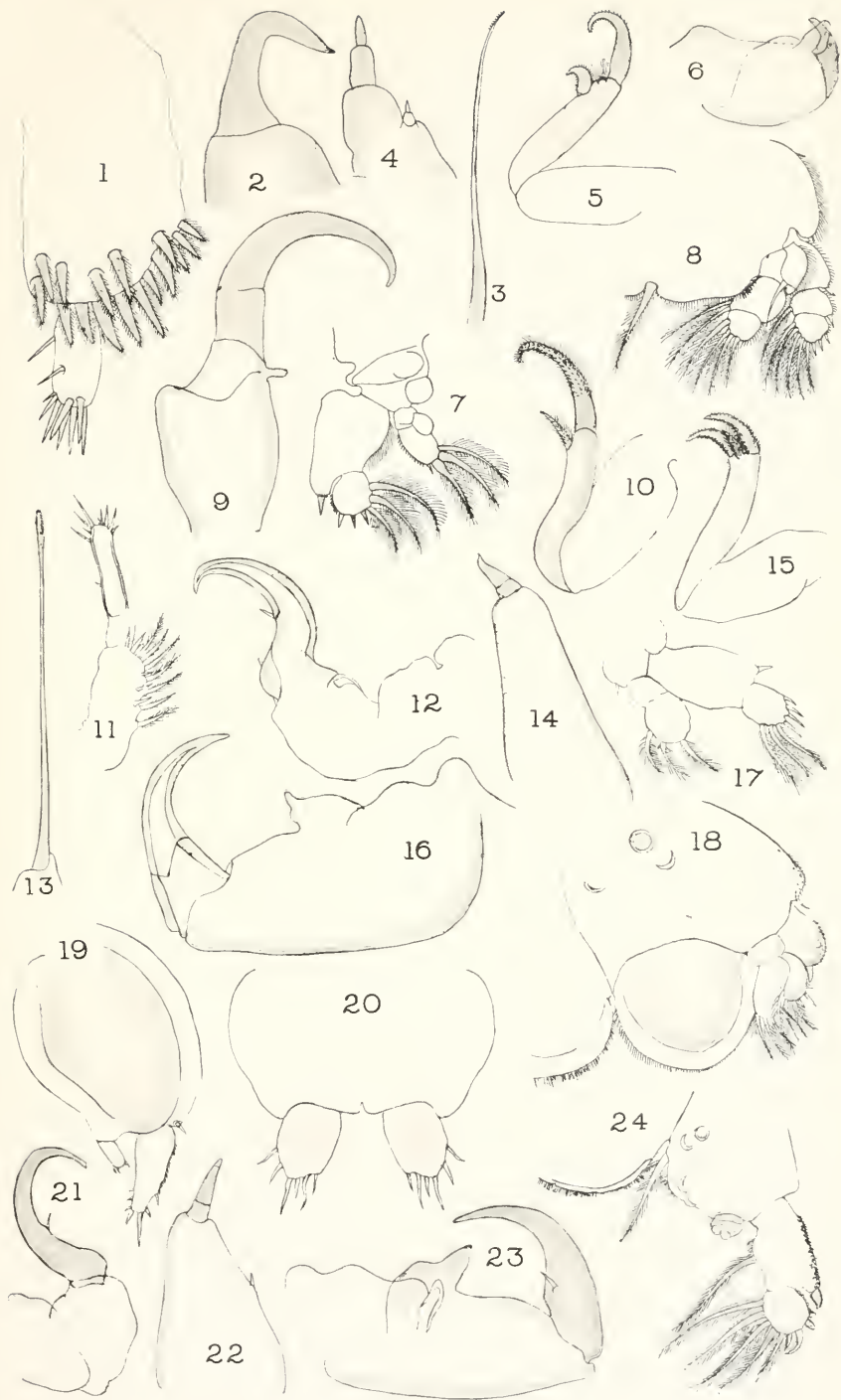


PLATE XXVIII.

FIGS.

- 1-7. *Cecrops latreillii* Leach, ♀. (p. 98.)
1. Antennule.
 2. Second maxilliped.
 3. Foot of first pair.
 4. Foot of second pair.
 5. Foot of third pair.
 6. Foot of fourth pair.
 7. Fifth foot.
- 8-18. *Orthagoriscola muricata* (Kröyer), ♀. (p. 100.)
8. Antennule.
 9. Antenna.
 10. Mandible.
 11. Maxilla.
 12. First maxilliped.
 13. Second maxilliped.
 14. Foot of first pair.
 15. Foot of second pair.
 16. Foot of third pair.
 17. Foot of fourth pair.
 18. Fifth foot.

(Figures much enlarged.)

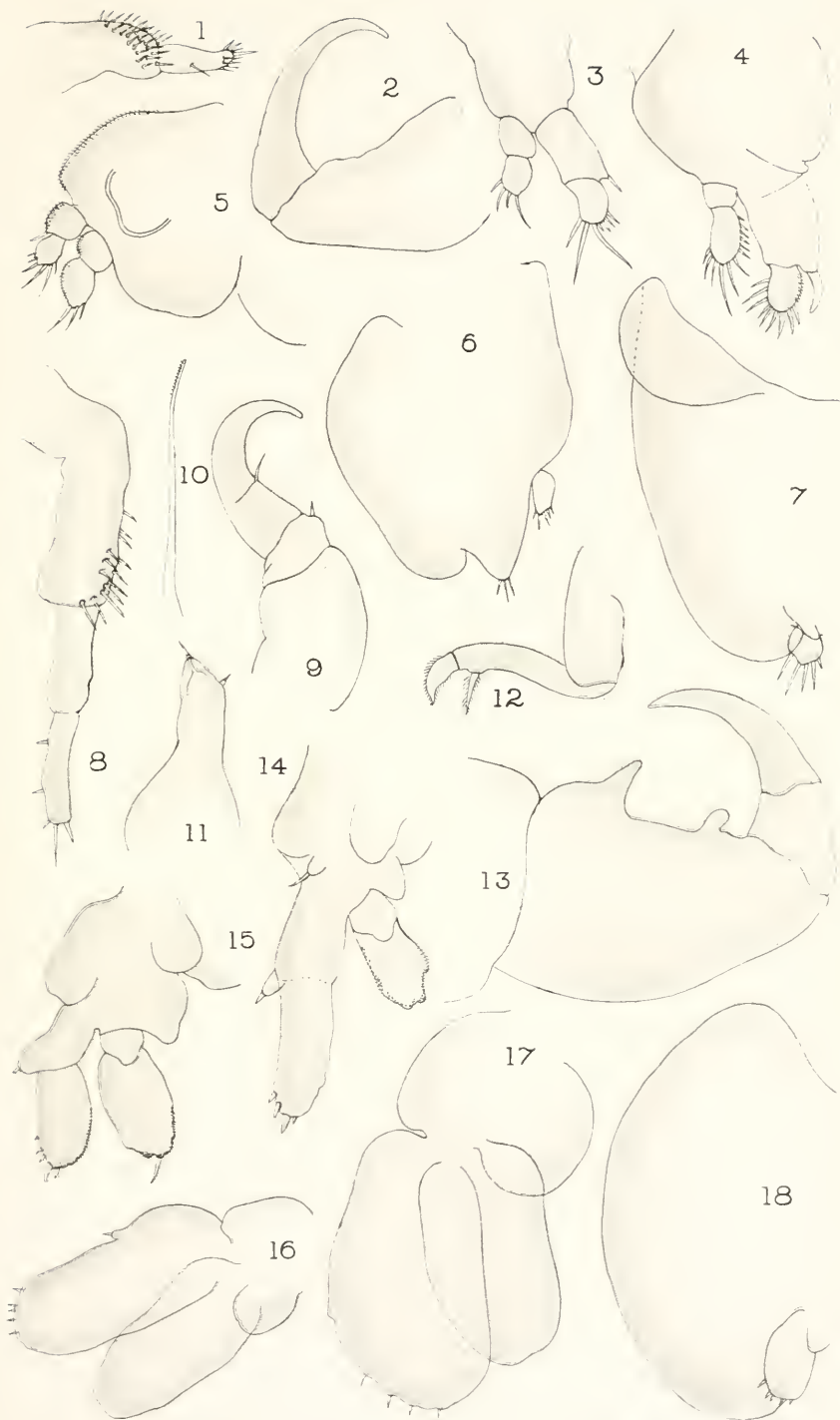
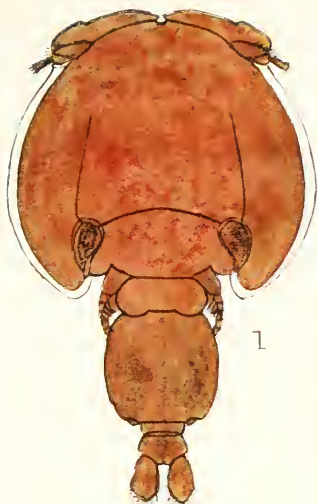


PLATE XXIX.

FIGS.

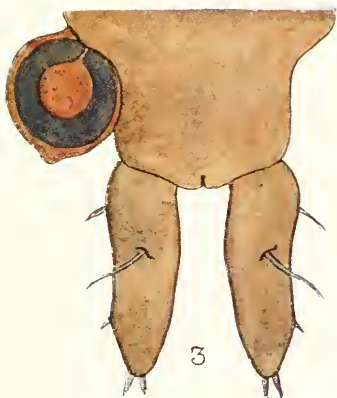
1. *Echthrogaleus lütkeni* (Norman). (p. 90.)
 1. Dorsal view, ♂ (enlarged).
- 2-5. *Lernanthropus kröyeri* P. J. van Beneden. (p. 110.)
 2. Dorsal view, ♀, $\times 13.4$.
 3. Abdomen and furcal joints, ♀ (much enlarged).
 4. Dorsal view, ♂, $\times 13.4$.
 5. Abdomen and furcal joints, ♂ (much enlarged).



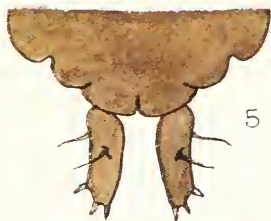
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PLATE XXX.

FIGS.

- 1-8. *Echthrogaleus lütkeni* (Norman), ♂. (p. 90.)
1. Antennule.
 2. Antenna.
 3. First maxilliped.
 4. Second maxilliped.
 5. Foot of first pair.
 6. Foot of second pair.
 7. Foot of third pair.
 8. Foot of fourth pair.
- 9-17. *Lernanthropus kröyeri* P. J. van Beneden, ♀. (p. 110.)
9. Antennule with secondary process.
 10. Antenna.
 11. Mandible.
 12. Maxilla.
 13. First maxilliped.
 14. Second maxilliped.
 15. Foot of first pair.
 16. Foot of second pair.
 17. Outer ramus of second foot, ♂.

(Figures much enlarged.)

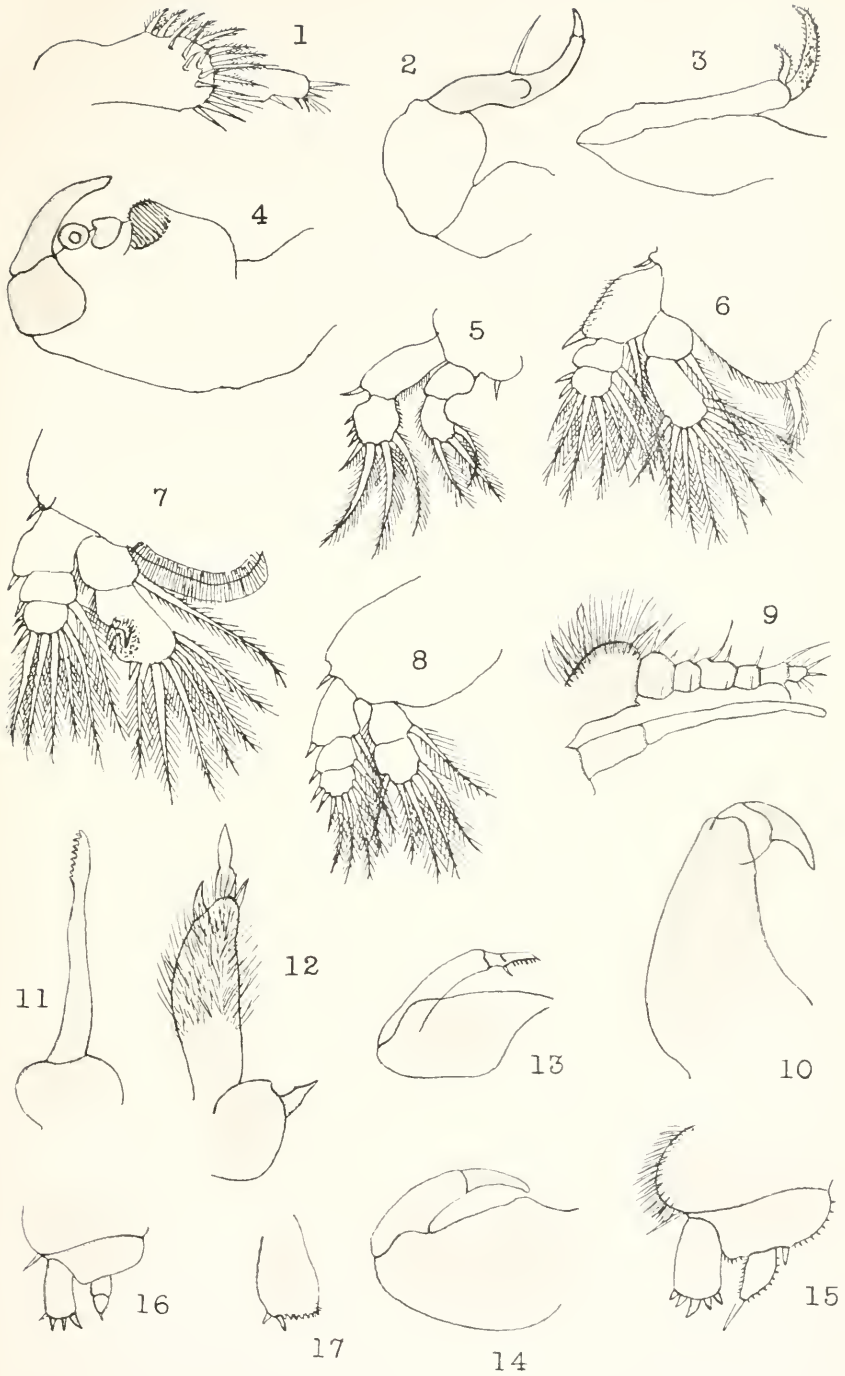


PLATE XXXI.

FIGS.

- 1-6. *Elytrophora brachyptera* Gerstaecker, ♀. (p. 83.)
1. Antenna.
2. First maxilliped.
3. Second maxilliped.
4. Foot of first pair.
5. Foot of fourth pair.
6. Antenna. ♂.
- 7-18. *Dichelestium oblongum* (Abildgaard), ♀ & ♂. (p. 106.)
7. ♀ Antennule.
8. Antenna.
9. Mandible.
10. Maxilla.
11. First maxilliped.
12. Second maxilliped.
13. Foot of first pair.
14. Foot of second pair.
15. Foot of fourth pair.
16. ♂ Antenna.
17. Foot of second pair.
18. Foot of fourth pair.

(Figures much enlarged.)

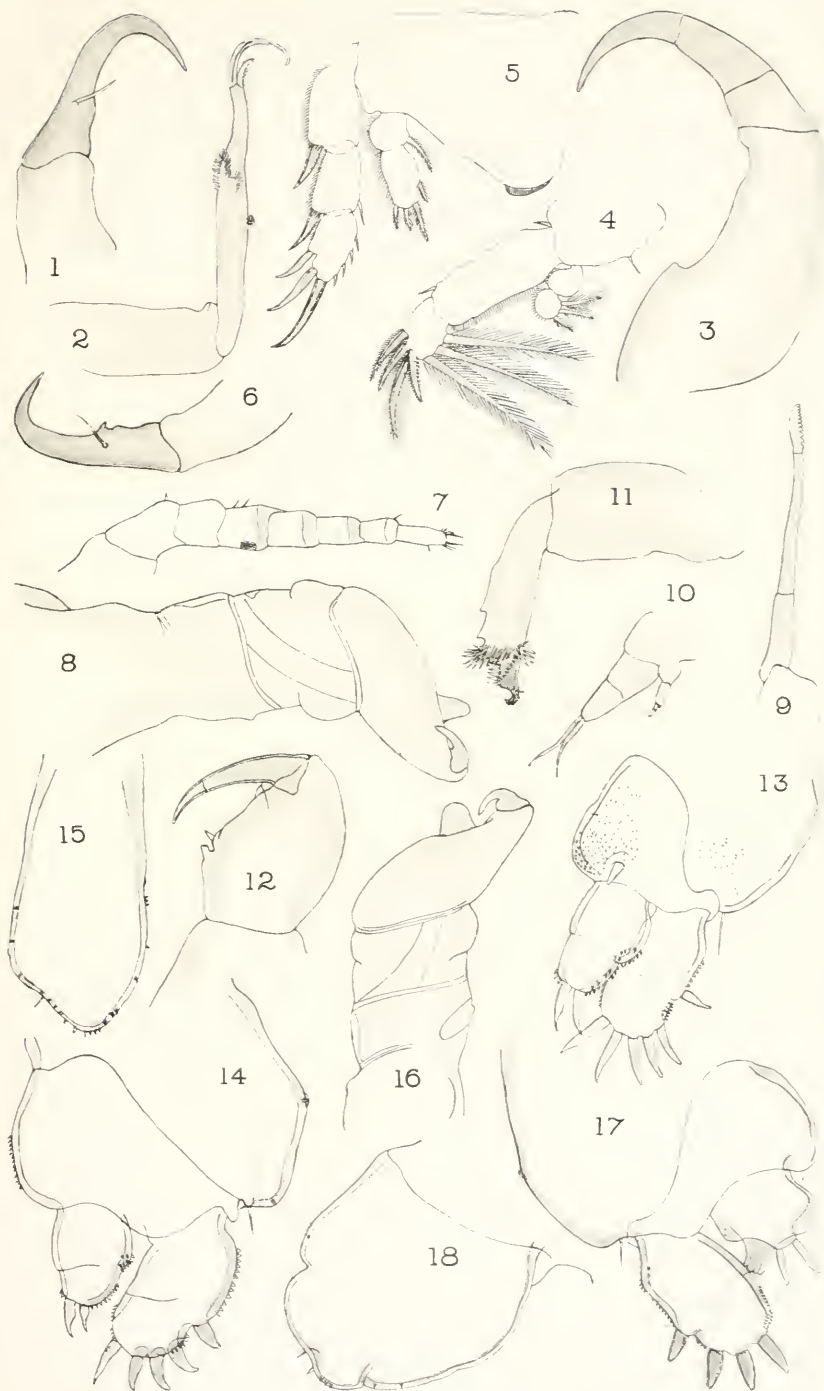


PLATE XXXII.

FIGS.

1-11. *Hatschekia mulli* (P. J. van Beneden), ♀. (p. 114.)

1. Adult female, dorsal view, $\times 24.5$.
2. Lateral view of head and thorax, adult $\times 36$.
3. Dorsal view, juv., $\times 36$.
4. Antennule.
5. Antenna.
6. Spiniform process at base of antenna.
7. Mandible.
8. Maxilla.
9. Maxilliped.
10. Foot of first pair.
11. Foot of second pair.

(Figures 4-11 much enlarged.)

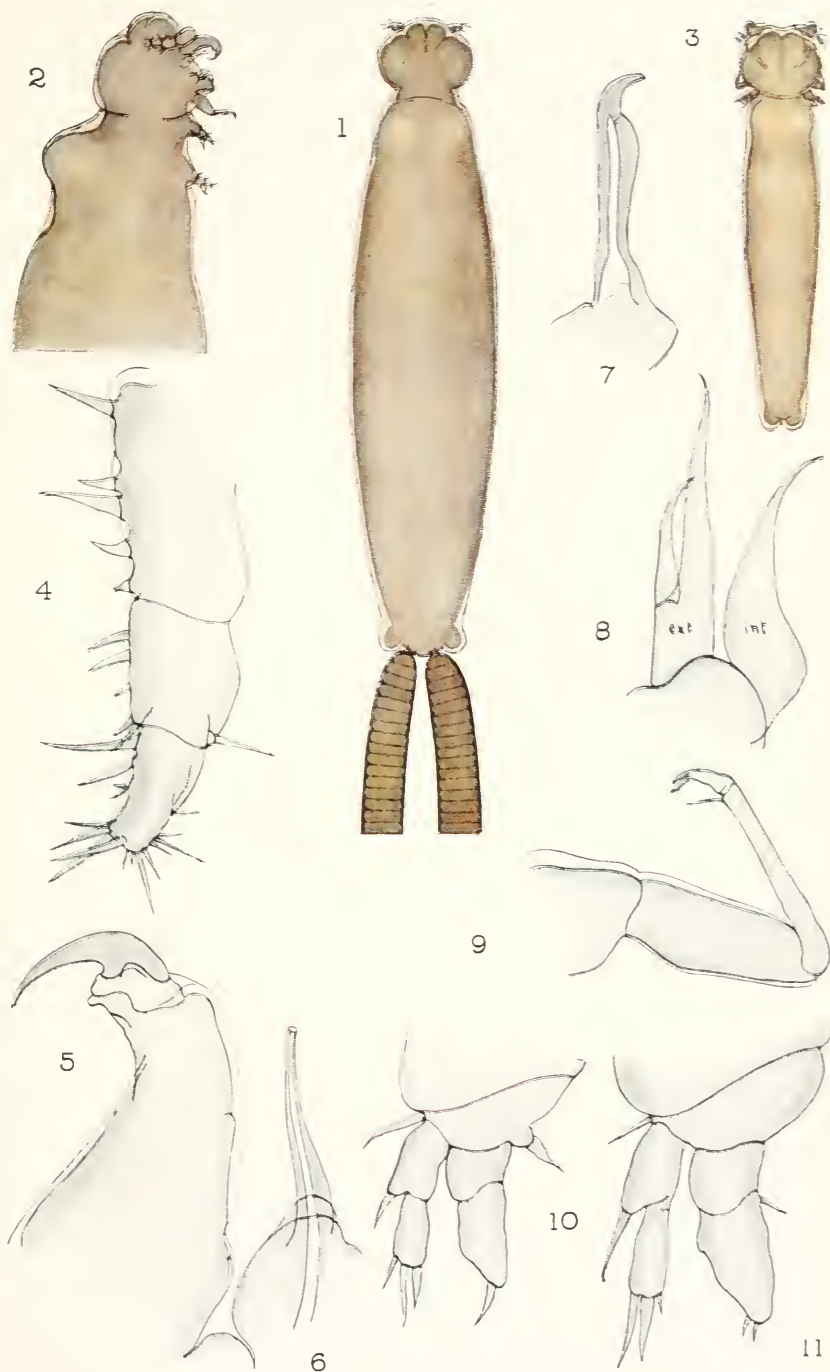
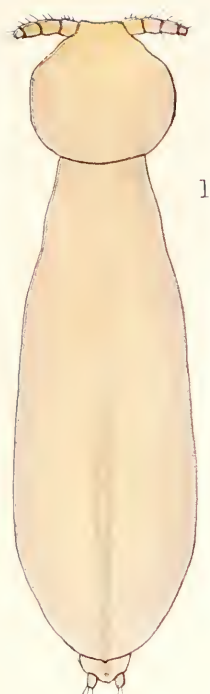


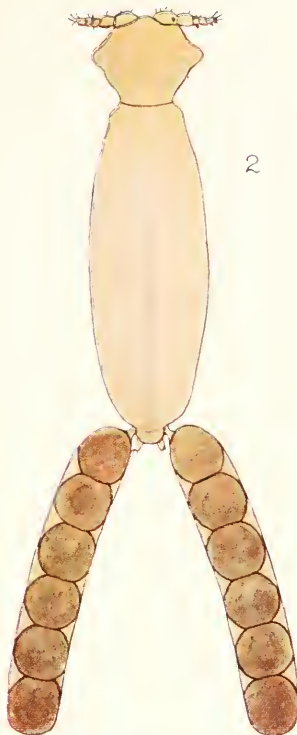
PLATE XXXIII.

FIGS.

1. *Hatschekia cluthæ* (T. Scott). (p. 117.)
 1. Dorsal view, ♀, × 58.
2. *Hatschekia labracis* (P. J. van Beneden). (p. 115.)
 2. Dorsal view, ♀, × 28.
- 3, 4. *Hatschekia hippoglossi* (Kröyer). (p. 112.)
 3. Dorsal view, ♀, × 7.
 4. Dorsal view, ♂, × 34.
5. *Thysanote impudica* (Nordmann). (p. 187.)
 5. Dorsal view, ♀, × 10.
6. ? *Lernæopoda lampri* sp. nov. (p. 202.)
 6. Lateral view, ♂, × 14.



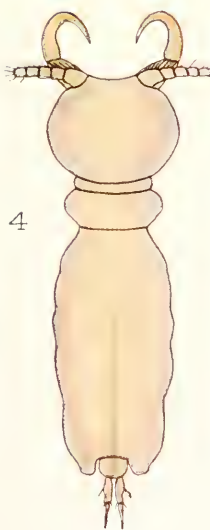
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PLATE XXXIV.

FIGS.

- 1-5. *Hatschekia cluthæ* (T. Scott), ♀. (p. 117.)
1. Antennule.
2. Antenna.
3. Maxilla.
4. Second maxilliped.
5. Foot of first pair.
6, 7. *Hatschekia labracis* (P. J. van Beneden), ♀. (p. 115.)
6. Antennule.
7. Antenna.
8-11. *Hatschekia hippoglossi* (Kröyer), ♀. (p. 112.)
8. Antennule.
9. Mandible.
10. Second maxilliped.
11. Foot of first pair.

(Figures much enlarged.)

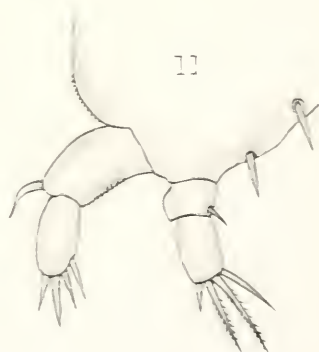
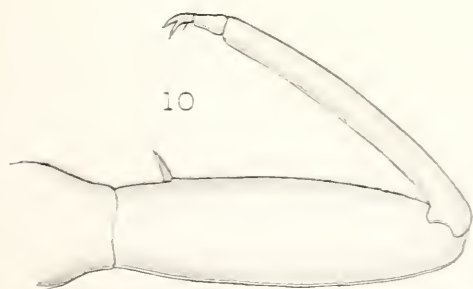
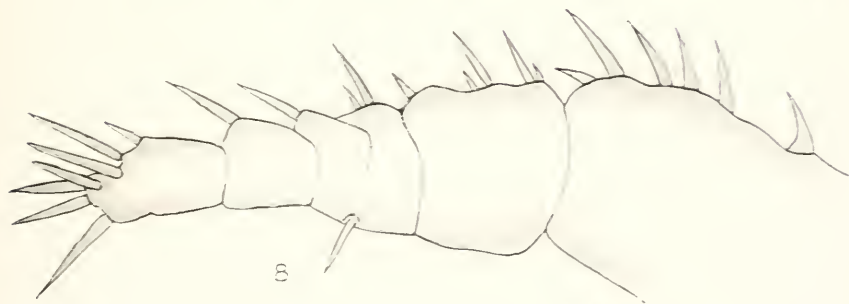
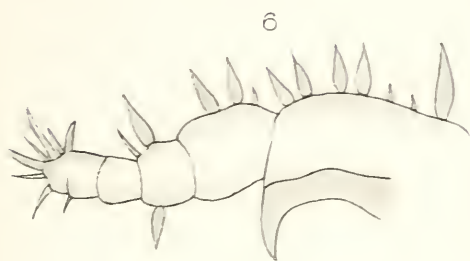


PLATE XXXV.

FIGS.

- 1, 2. *Hatschekia cornigera* T. Scott, ♀. (p. 118.)
1. Dorsal view, \times 40.
2. Lateral view of head and thorax, \times 80.
3-7. *Hatschekia pygmæa* T. Scott, ♀. (p. 119.)
3. Dorsal view, \times 45.
4. Maxilliped.
5. Foot of first pair.
6. Foot of second pair.
7. Abdomen and furcal joints.

(Figures 4-7 much enlarged.)

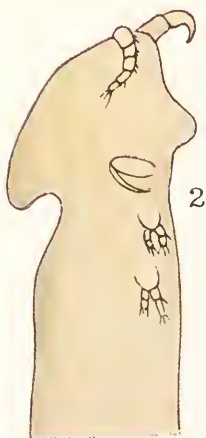
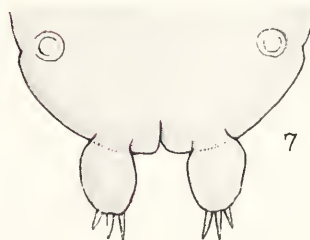
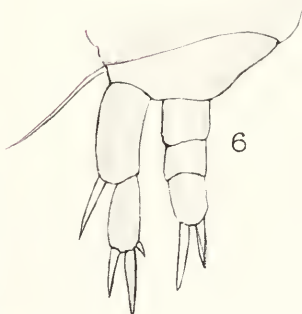
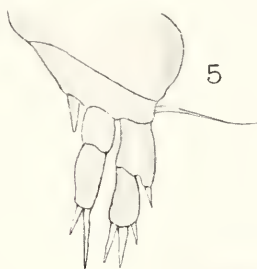
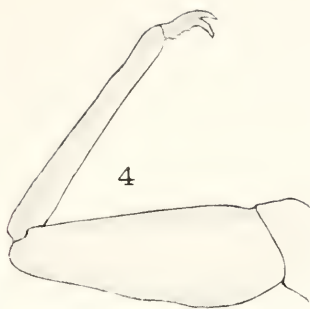


PLATE XXXVI.

FIGS.

1-5. *Hatschekia cornigera* T. Scott, ♀. (p. 118.)

1. Antennule.

2. Antenna.

3. Maxilliped.

4. Foot of first pair.

5. Foot of second pair.

6-9. *Hatschekia pygmæa* T. Scott, ♀. (p. 119.)

6. Antennule.

7. Antenna.

8. Mandible.

9. Maxilla.

(Figures much enlarged.)

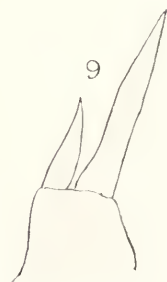
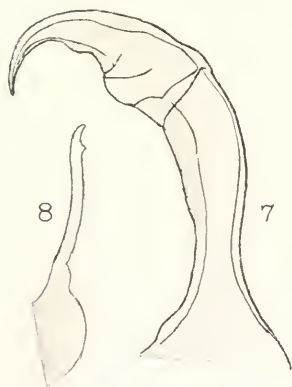
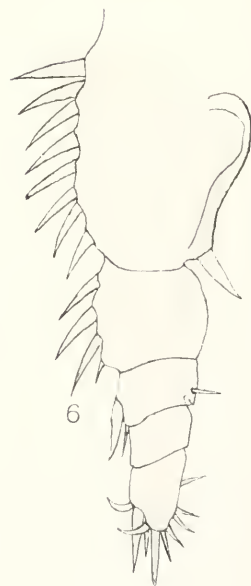
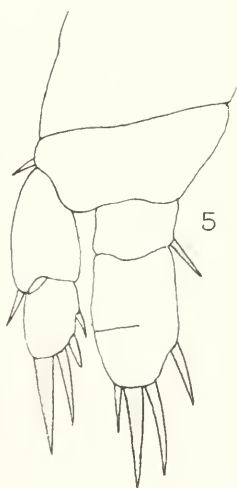
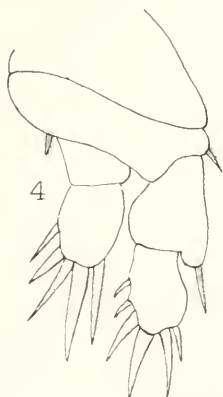
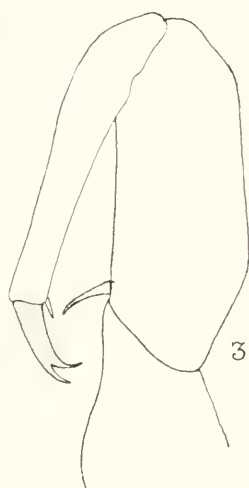
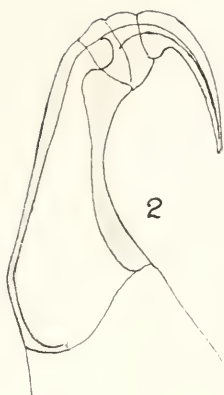
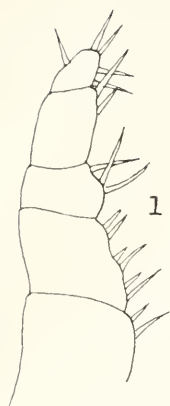
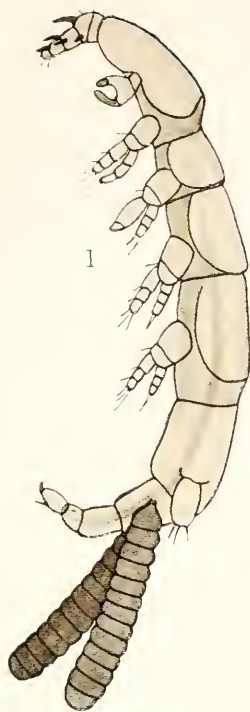


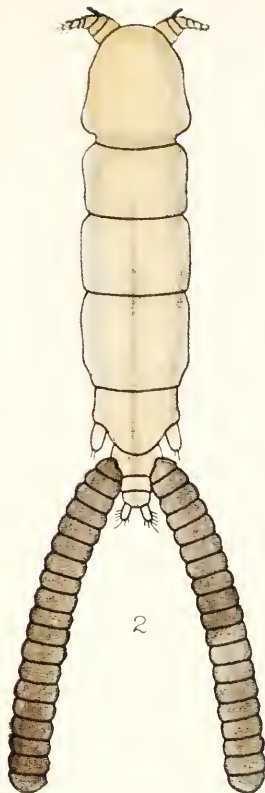
PLATE XXXVII.

FIGS.

1. *Eudactylina acuta* P. J. van Beneden. (p. 126.)
 1. Dorsal view, ♀, × 41.
- 2, 3. *Eudactylina acanthii* A. Scott. (p. 128.)
 2. Dorsal view, ♀, × 41.
 3. Lateral view, ♀, × 41.
- 4, 5. *Eudactylina similis* T. Scott. (p. 130.)
 4. Lateral view, ♀, × 34.
 5. Lateral view, ♂, × 34.
- 6, 7. *Eudactylina minuta* T. Scott. (p. 133.)
 6. Dorsal view, ♀, × 40.
 7. Lateral view, ♀, × 40.



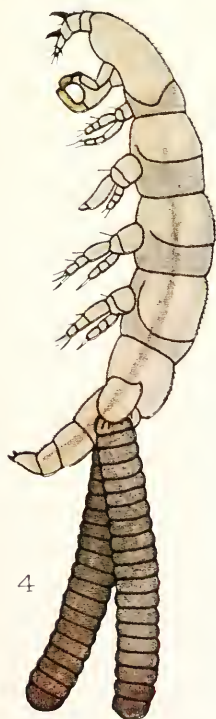
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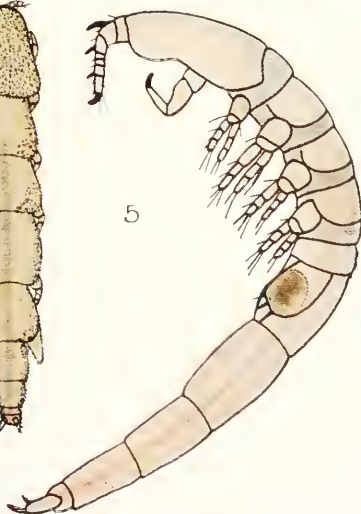
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PLATE XXXVIII.

FIGS.

- 1-5. *Eudactylina acuta* P. J. van Beneden, ♀. (p. 126.)
1. Antennule.
 2. Foot of first pair.
 3. Foot of second pair.
 4. Foot of fifth pair.
 5. Part of abdomen, and furcal joints.
- 6-12. *Eudactylina acanthii* A. Scott, ♀. (p. 128.)
6. Antennule.
 7. Antenna.
 8. Foot of first pair.
 9. Foot of second pair.
 10. Foot of fourth pair.
 11. Foot of fifth pair.
 12. Part of abdomen, and furcal joints.

(Figures much enlarged.)

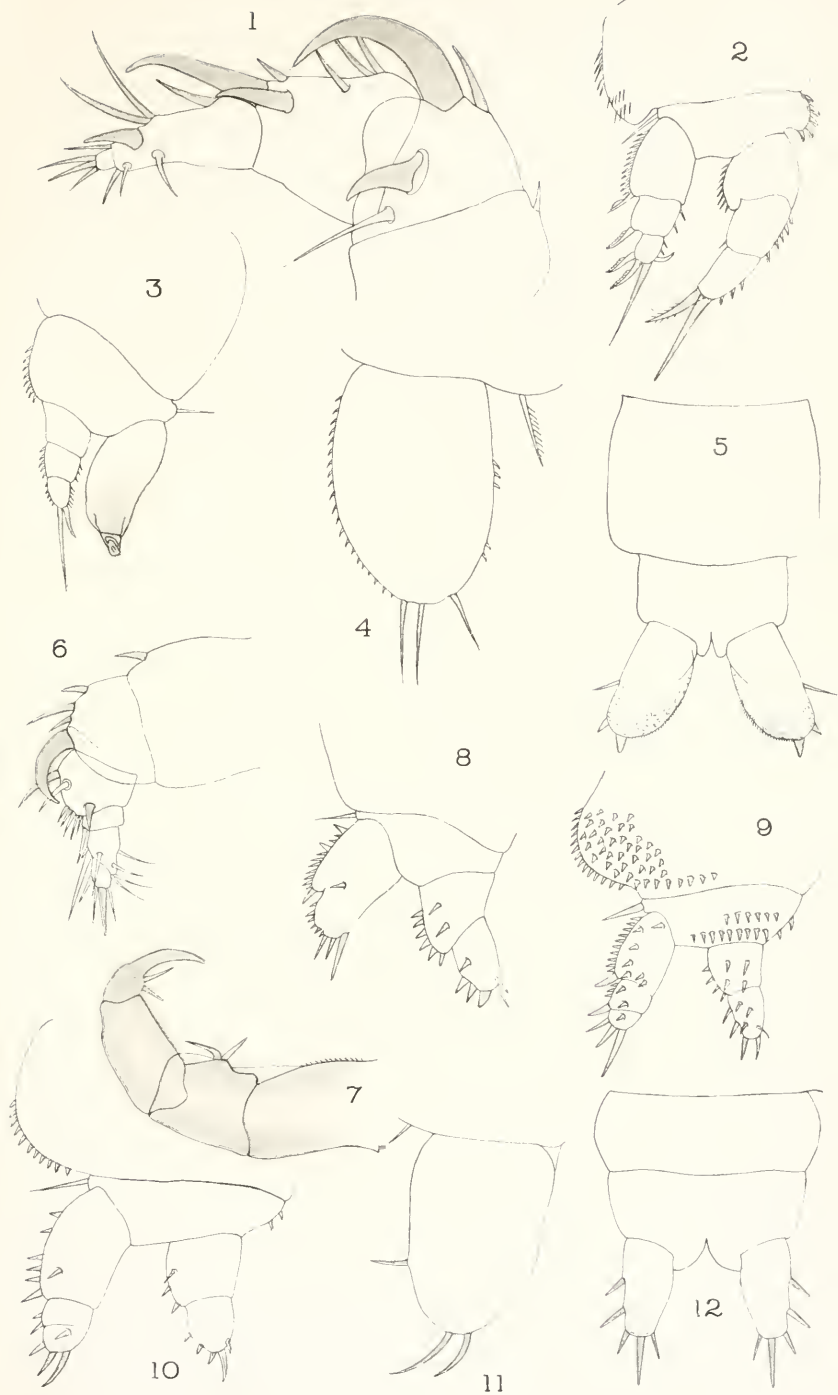


PLATE XXXIX.

FIGS.

1-17. *Eudactylina similis* T. Scott, ♀ & ♂. (p. 130.)

1. ♀ Antennule.
2. Antenna.
3. Mandible.
4. Maxilla.
5. First maxilliped.
6. Second maxilliped.
7. Foot of first pair.
8. Foot of second pair.
9. Foot of fourth pair.
10. Foot of fifth pair.
11. Part of abdomen, and furcal joints.
12. ♂ Antennule.
13. Second maxilliped.
14. Foot of first pair.
15. Foot of second pair.
16. Foot of fourth pair.
17. Part of abdomen, and furcal joints.

(Figures much enlarged.)

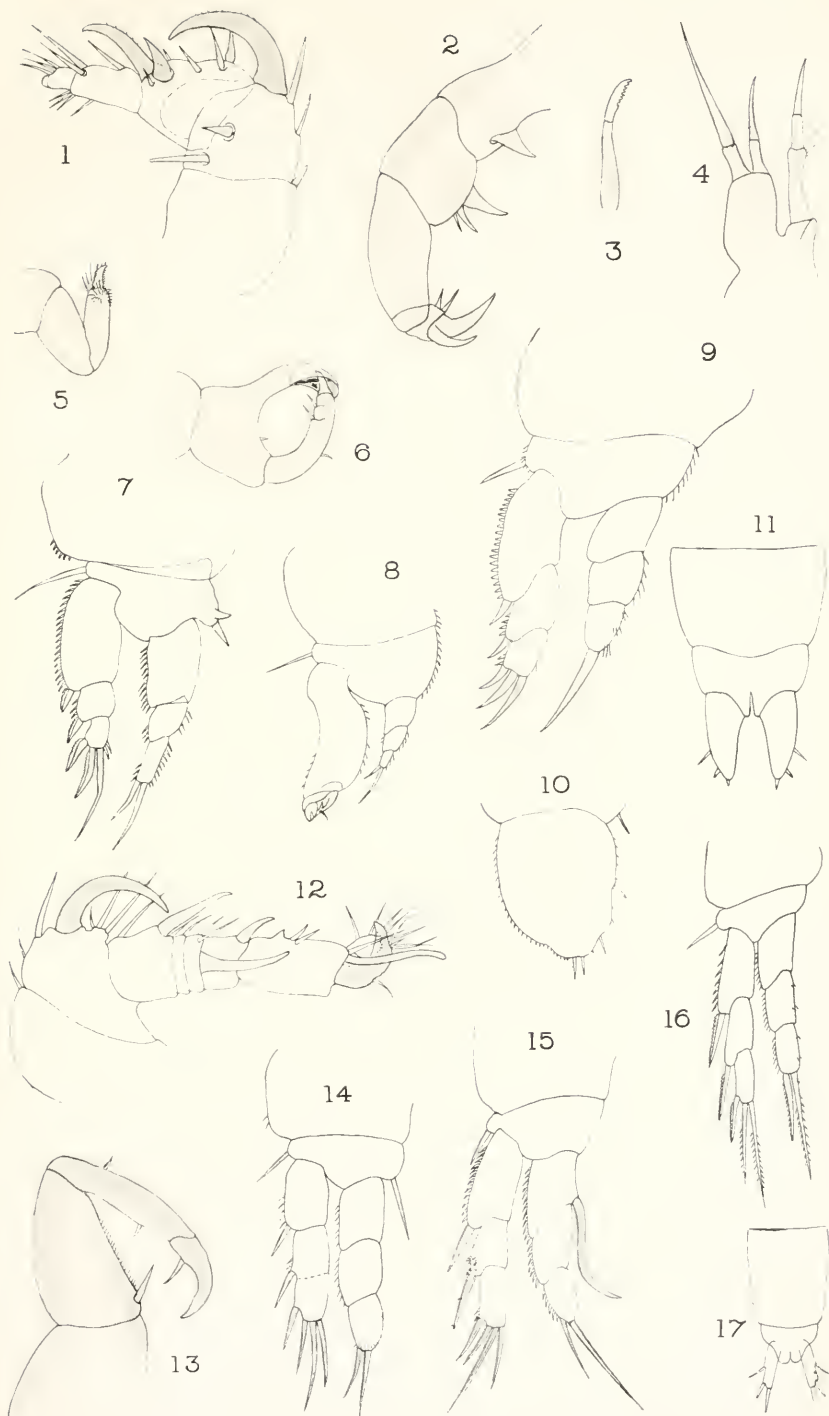


PLATE XL.

FIGS.

1-9. *Eudactylina minuta* T. Scott, ♀. (p. 133.)

1. Antennule.
2. Antenna.
3. First maxilliped.
4. Second maxilliped.
5. Foot of first pair.
6. Foot of second pair.
7. Foot of fourth pair.
8. Foot of fifth pair.
9. Part of abdomen, and furcal joints.

(Figures much enlarged.)

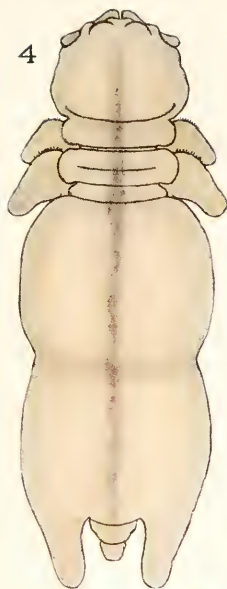


PLATE XLI.

FIGS.

1. *Congericola pallida* P. J. van Beneden, ♀ dorsal view,
× 17. (p. 124.)
- 2-4. *Chondracanthus depressus* T. Scott. (p. 172.)
 2. ♀ Dorsal view, × 12.
 3. Posterior end of body in dorsal view, × 12.
 4. Var. *oblongus*, ♀ dorsal view, × 12. (p. 173.)
5. *Chondracanthus zeii* De la Roche, ♀ dorsal view, × 5.
(p. 177.)
6. *Chondracanthus ornatus* T. Scott, ♀ dorsal view, × 10.
(p. 182.)

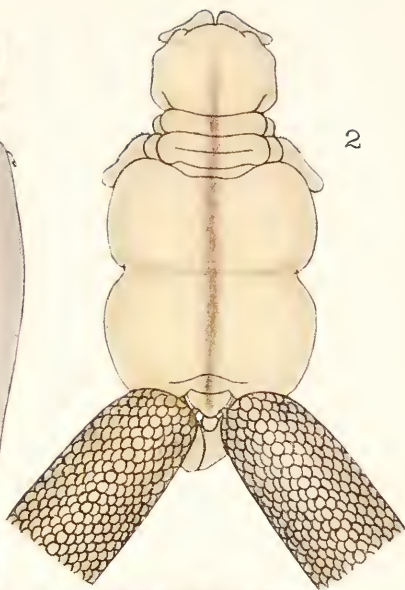
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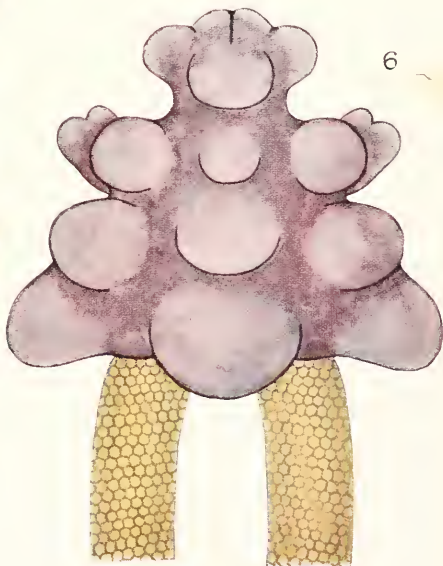


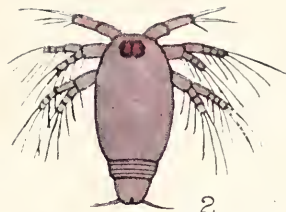
PLATE XLII.

FIGS.

- 1-8. *Lernæa branchialis* Linn. (p. 142.)
 1. Mature female, side view, $\times 4$.
 2. Newly hatched nauplius $\times 51$. (p. 21.)
 3. Very young female, unfertilized, dorsal view, $\times 51\frac{1}{2}$. (p. 21.)
 4. Fertilized female, after leaving the gills of a flounder, dorsal view $\times 27\frac{1}{2}$. (p. 21.)
 5. Mature male, dorsal view, $\times 28\frac{1}{2}$. (p. 21.)
 6. Fertilized female, 'Pennella stage,' just after attachment to the gills of a whiting, dorsal view, $\times 15\frac{1}{2}$. (p. 23.)
 - 6a. A later stage than fig. 6; the folding has just been completed; side view, natural size. (p. 23.)
 7. Apex of the gill-ray of a flounder, normal, $\times 18$. (p. 22.)
 8. Apex of the gill-ray of a flounder, shewing malformation caused by the young *Lernæa*, $\times 18$. (p. 22.)



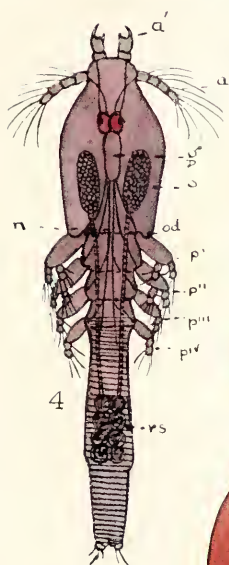
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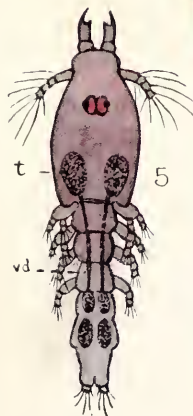
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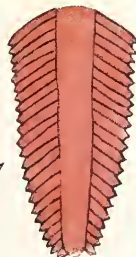
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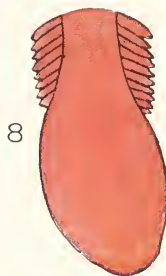
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PLATE XLIII.

FIGS.

1-7. *Lernæa branchialis* Linn. (p. 142.)

1. Fertilized female, ventral view, shewing the appendages, the reproductive organs, and the nervous system, $\times 47\frac{1}{2}$. (p. 22.)
2. Mature female, seen from the right side, shewing the maxilliped and four pairs of feet, the alimentary canal, and the reproductive organs; from a specimen cleared in xylol, $\times 4$. (p. 19.)
3. Transverse section through the middle of the swollen region, shewing the ovary, the oviducts, cement glands, and intestine, $\times 9$. (p. 21.)
4. Transverse section through the abdomen, $\times 20$. (p. 22.)
5. Portion of the cement-gland, $\times 20$. (p. 21.)
6. Transverse section through the region of the eyes of a young fertilized female, $\times 80$. (p. 22.)
7. Front view of the anchor processes of an adult female, $\times 4$. (p. 22.)

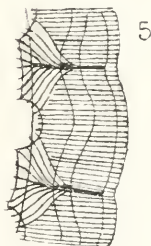
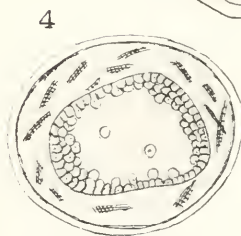
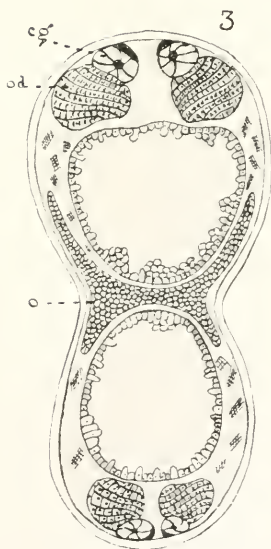
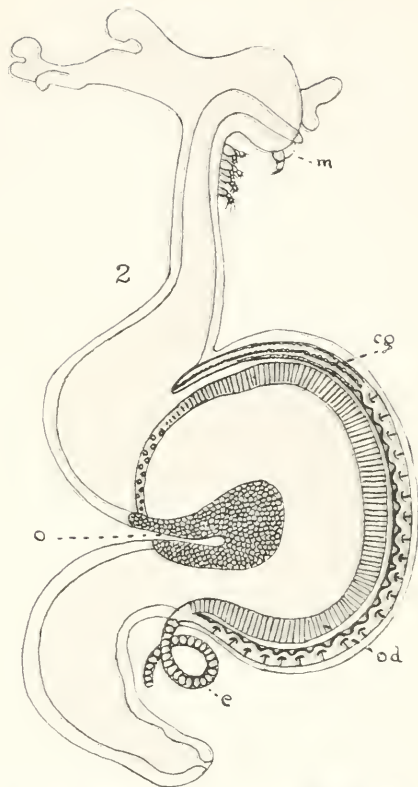
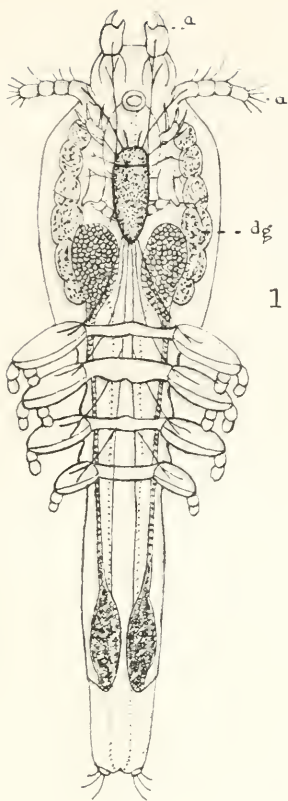


PLATE XLIV.

FIGS.

1. *Lernæa lusci* Bassett-Smith, ♀ side view, × 6. (p. 144.)
2. Another specimen (♀) *in situ* on gill-arch of fish, × about 2.
3. *Lernæa minuta*, T. Scott, ♀ side view, × about 5. (p. 145.)
4. *Lernæa lumpi*, T. Scott, ♀ side view, × about 2. (p. 146.)
- 5-7. *Hæmobaphes cyclopterina* (Fabr.). (p. 147).
 5. Side view (head wanting), × 9.
 6. The head, after Steenstrup & Lütken, enlarged.
 7. The same, seen from another position, enlarged.
8. *Hæmobaphoides ambiguus* T. Scott, ♀ side view, × 7. (p. 148.)

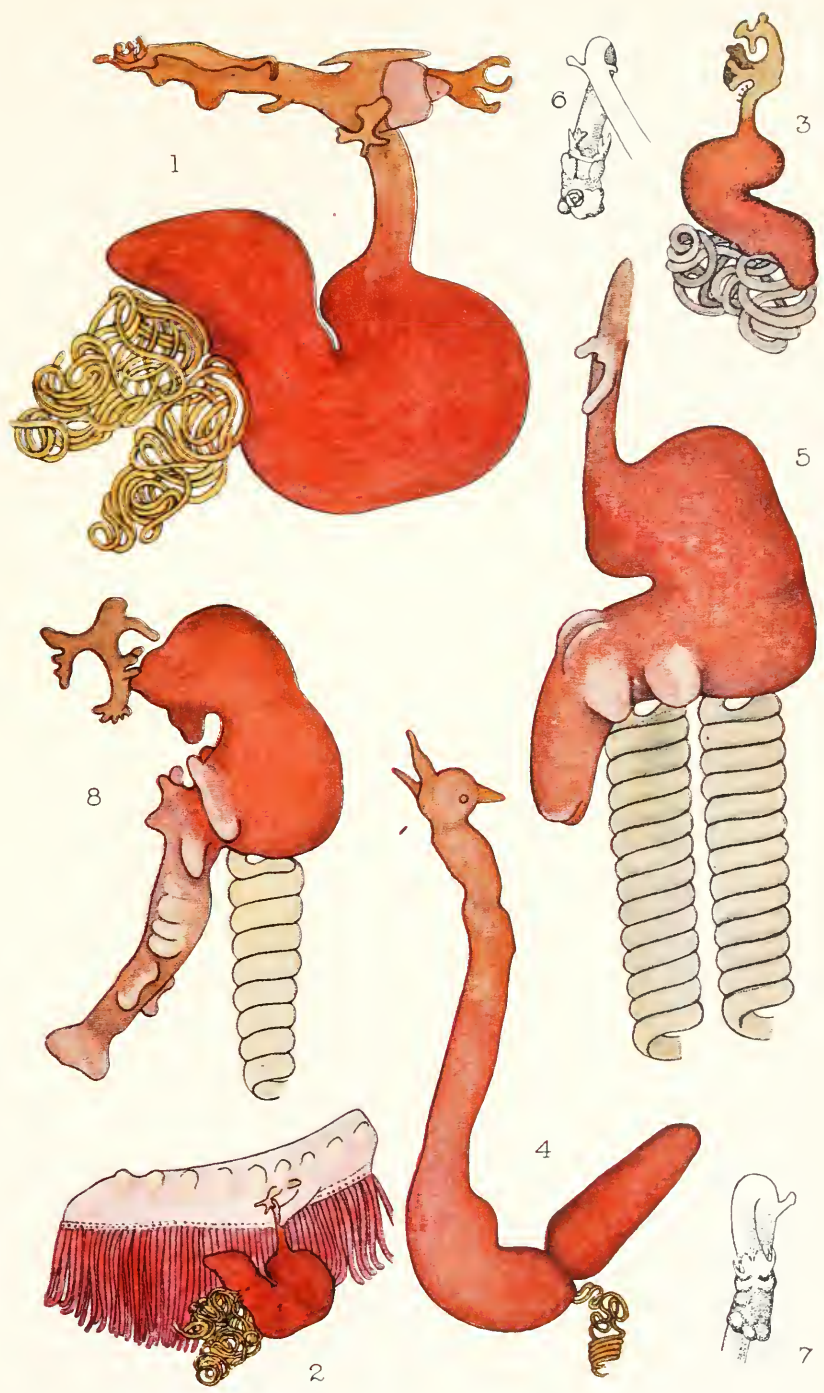


PLATE XLV.

FIGS.

1. *Rebelula edwardsi* (Kolliker), ♀ dorsal view, enlarged.
(p. 162.)
- 2, 3. *Philichthys xiphiæ* Steenstrup, ♀. (p. 139.)
 2. A young specimen, dorsal view, enlarged.
 3. An older specimen, dorsal view, enlarged.
- 4, 5. *Dichelestium oblongum* (Abildgaard). (p. 106.)
 4. Dorsal view, ♀, × about 4.
 5. Dorsal view, ♂, × about 4.
6. *Tripaphylus musteli* P. J. van Beneden, ♂ side view, enlarged. (p. 160.)
7. *Chondracanthus ornatus* T. Scott, ♂ side view, greatly enlarged. (p. 182.)
8. *Brachiella rostrata* Kröyer, ♂ side view, × about 25.
(p. 205.)

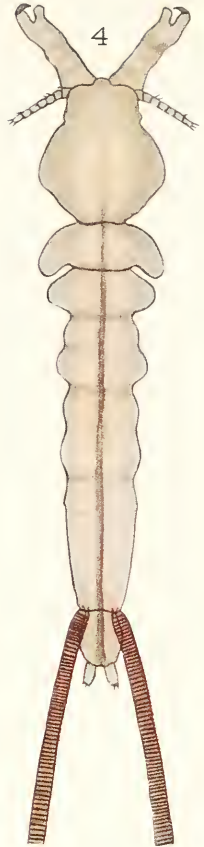
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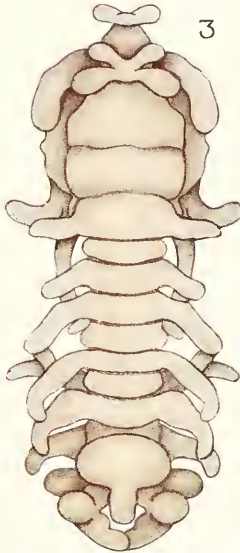
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4



3



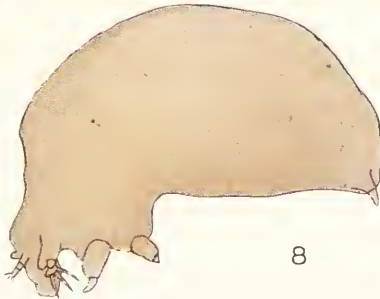
6



7



8



5



PLATE XLVI.

FIGS.

1-5. *Lernæenicus sprattæ* (Sowerby). (p. 156.)

1. Female *in situ* in eye of sprat, natural size.

2. Female removed from fish, \times about $2\frac{1}{3}$.

3. Head and neck of female, more enlarged.

4. Antennule, greatly enlarged.

5. Antenna, greatly enlarged.

6-9. *Lernæenicus encrassicola* (Turton). (p. 158.)

6. Female *in situ* in back of sprat, natural size.

7. Shows head of female penetrating into the abdominal cavity of the sprat, enlarged.

8. Head of female, ventral view, enlarged.

9. Head, side view, enlarged.

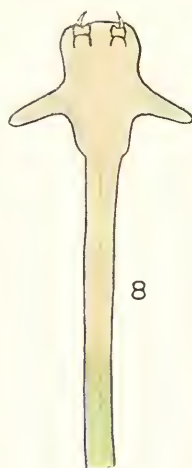
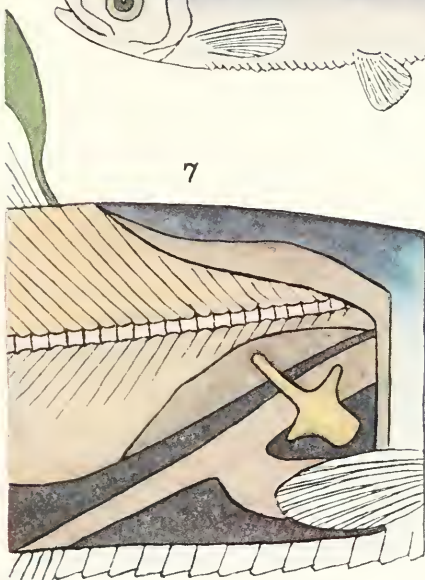
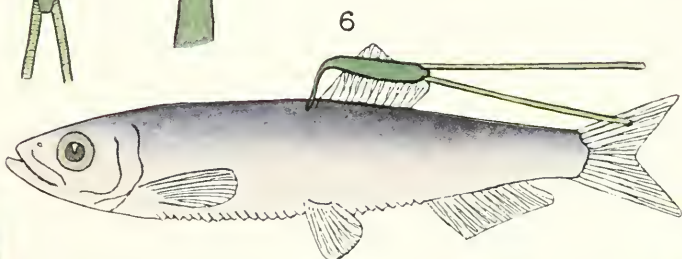
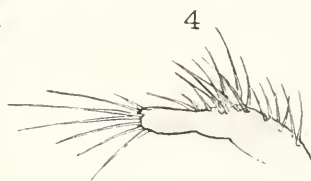
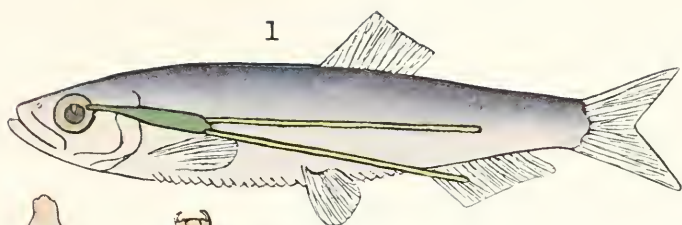


PLATE XLVII.

FIGS.

1. *Chondracanthus cornutus* (O. F. Müller), ♀, × about 6. (p. 168.)
2. *Chondracanthus cornutus*, var. ♀, × 6. (p. 169.)
3. *Chondracanthus annulatus* Olsson, ♀, × 4. (p. 169.)
4. *Chondracanthus soleæ* Kröyer, ♀, × 7. (p. 170.)
5. *Chondracanthus fluræ* Kröyer, ♀, × 6. (p. 171.)
6. *Chondracanthus limandæ* Kröyer, ♀, × 13. (p. 174.)
7. *Chondracanthus clavatus* Bassett-Smith, ♀, × 8. (p. 175.)
8. *Chondracanthus merluccii* (Holten), ♀, × 8. (p. 180.)

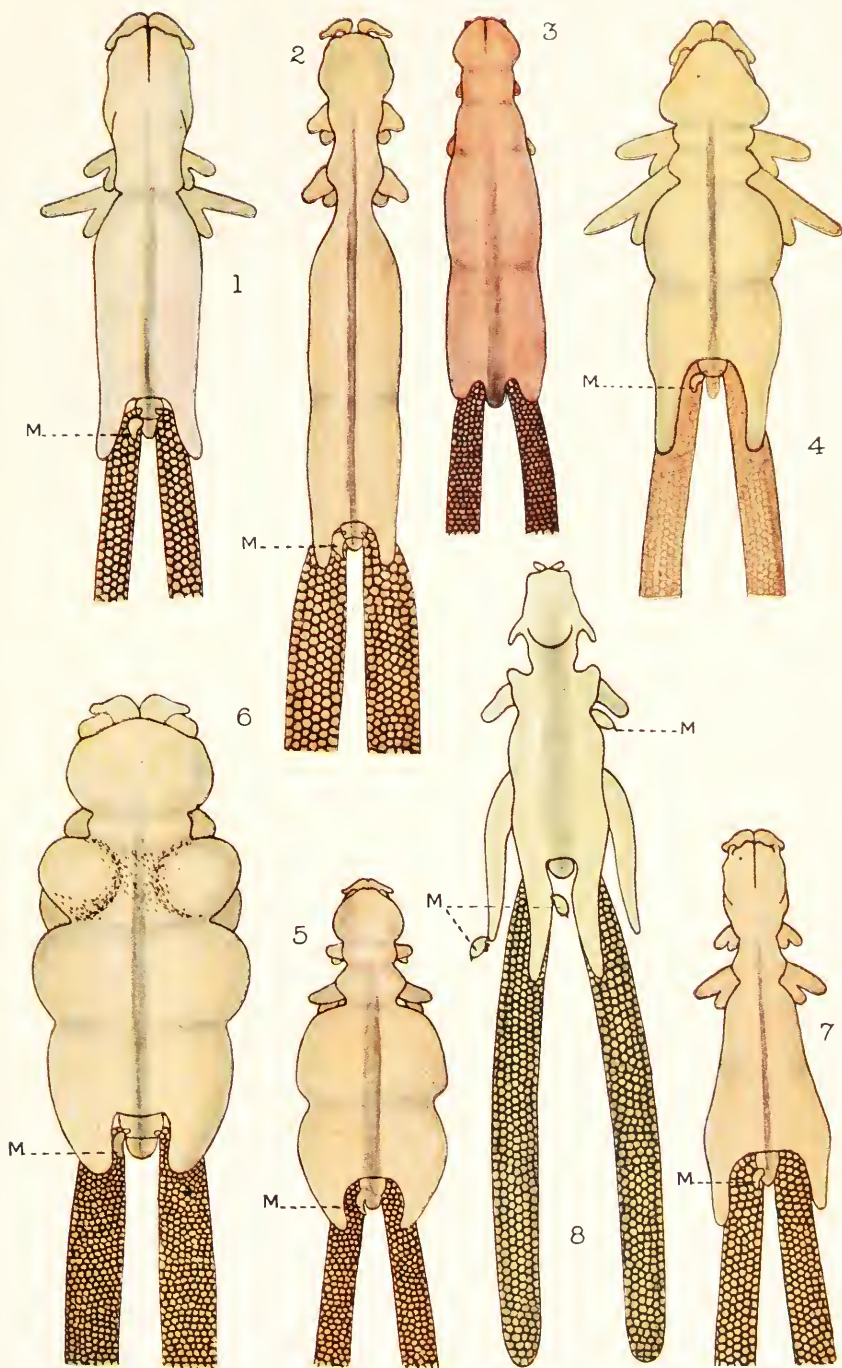


PLATE XLVIII.

FIGS.

- 1-3. *Lepeophtheirus thompsoni* Baird, ♀. (p. 69.)
 1. Sternal fork.
 2. Sternal fork, another form.
 3. Foot of fourth pair.
- 4, 5. *Lepeophtheirus pollachii* Bassett-Smith, ♀. (p. 73.)
 4. Sternal fork.
 5. First maxilliped.
6. *Caligus brevicaudatus* A. Scott, ♀. Sternal fork.
(p. 56.)
7. *Caligus diaphanus* Nordmann, ♀. Sternal fork.
(p. 60.)
- 8-12. *Lernæopoda salmonea* (Linn.), ♀. (p. 199.)
 8. Antennule.
 9. Antenna.
 10. Mandible.
 11. Maxilla.
 12. First maxilliped.
- 13-16. *Chondracanthus nodosus* (O. F. Müller), ♀. (p. 176.)
 13. Antennule.
 14. Mandible and maxilla.
 15. Foot of first pair.
 16. Foot of second pair.
17. *Ergasilus nanus* P. J. van Beneden, ♀. Antenna.
(p. 34.)
18. *Brachiella insidiosa* Heller, adult male, side view,
× 18. (p. 206.)
(Figs. 1-17 much enlarged.)

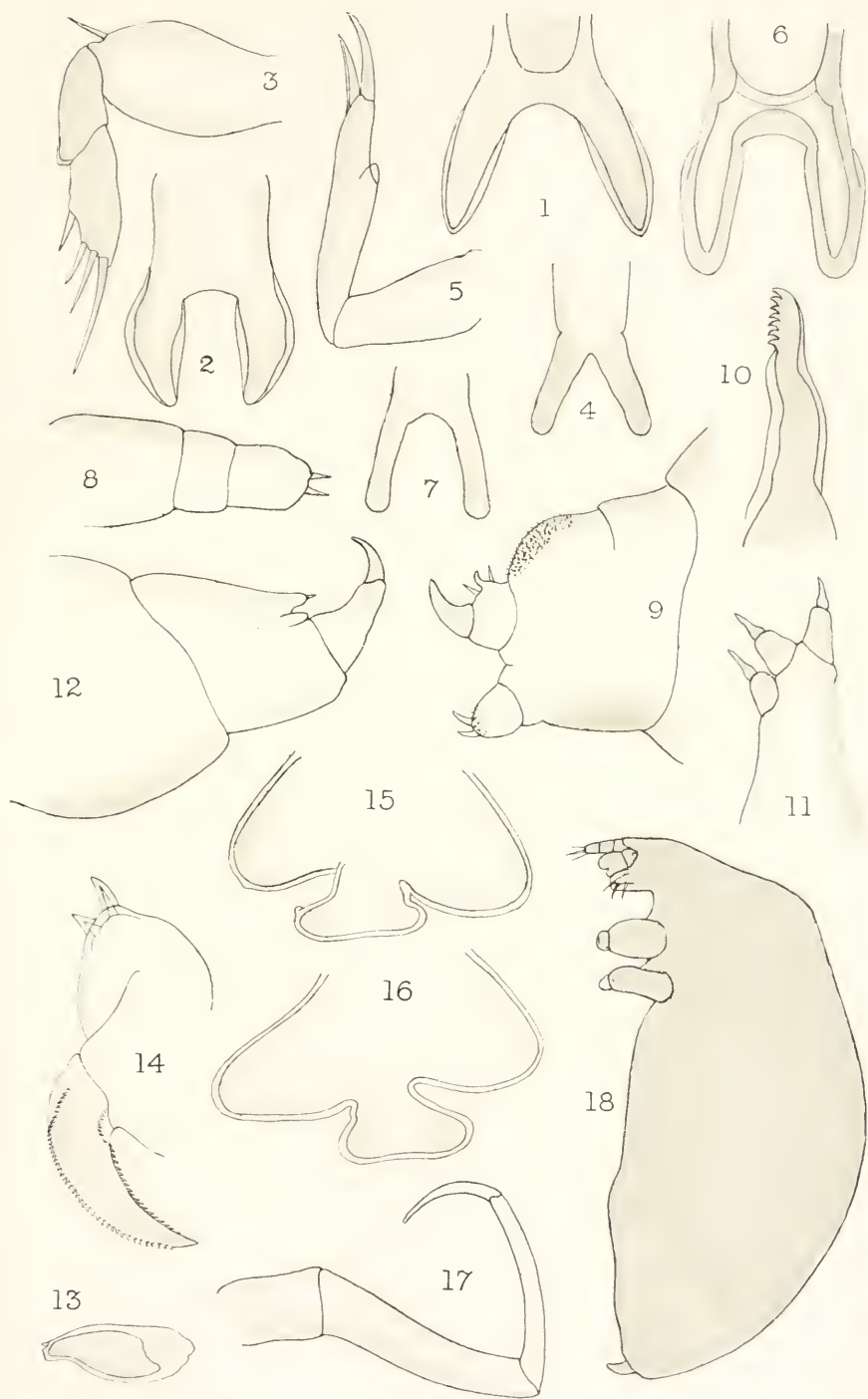


PLATE XLIX.

FIGS.

- 1-7. *Tripaphylus musteli* (P. J. van Beneden), ♂. (p. 160.)
1. Antennule.
2. Antenna.
3. Mandible.
4. Maxilla.
5. First maxilliped.
6. Second maxilliped.
7. Abdomen.
8-11. *Thysanote impudica* (Nordmann), ♀. (p. 187.)
8. Antennule.
9. Mandible.
10. Maxilla.
11. First maxilliped.
12-16. (?) *Lernæopoda lampri* sp. n., ♂. (p. 202.)
12. Antenna.
13. Mandible.
14. Maxilla.
15. First maxilliped.
16. Second maxilliped.

(Figures much enlarged.)

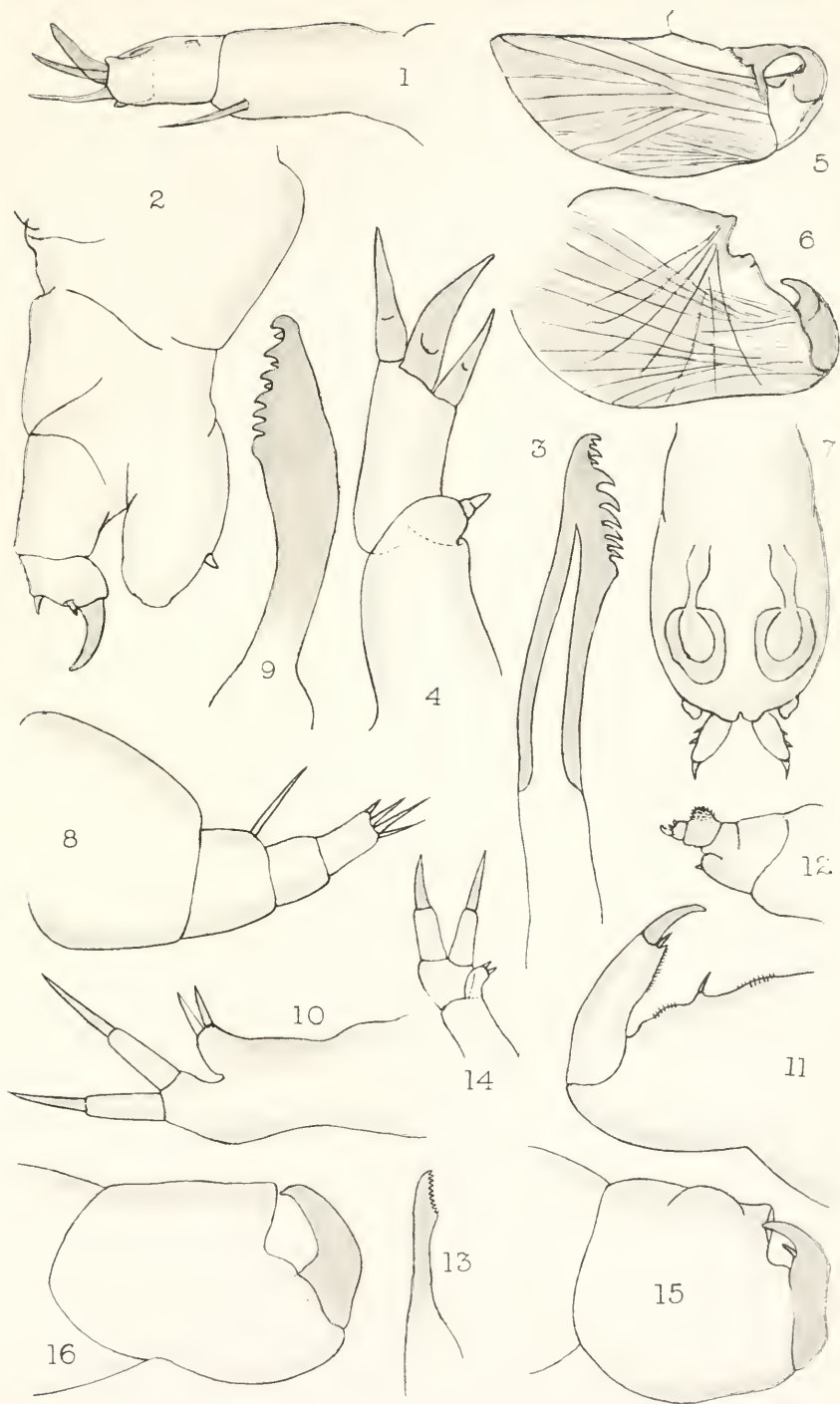




PLATE L.

FIGS.

- 1-5. *Lerneocera cyprinacea* (Linn.), ♀. (p. 154.)
1. A specimen seen from the side, $\times 9$.
2. The head, front view.
3. The head, seen from another position, more enlarged than fig. 2.
4. A specimen of *L. cyprinacea*, $\times 5$. (After Selago.)
5. Another specimen, \times about 3. (After Baird.)
6-8. *Achtheres percarum* Nordmann. (p. 193.)
6. A female, dorsal view, $\times 18$.
7. Distal extremity of second maxillipeds, enlarged.
8. A male, dorsal view, $\times 85$.
9. *Brachiella bispinosa* Nordmann, ♀ dorsal view, $\times 7$. (p. 211.)

(Figs. 1-3 and 6-9 after Nordmann.)

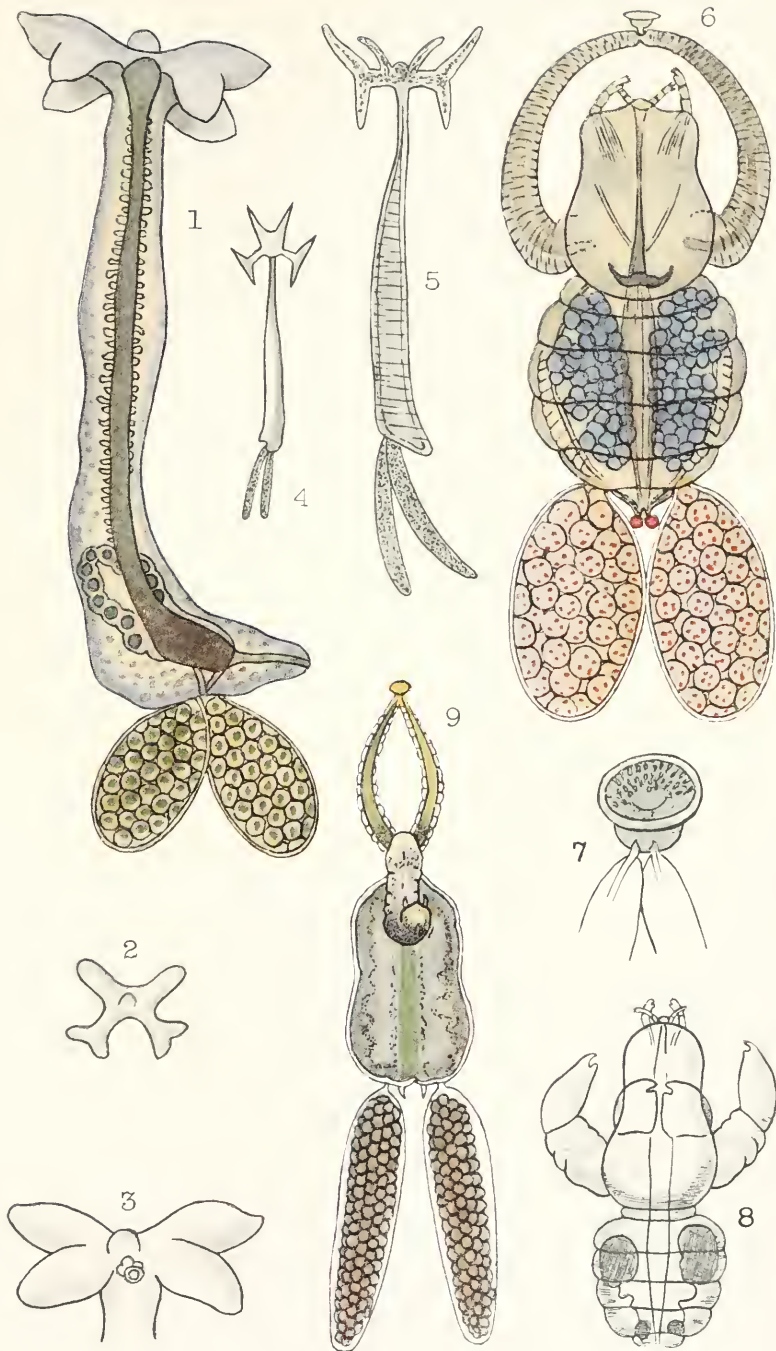


PLATE LI.

FIGS.

1. *Tripaphyllus musteli* (P. J. van Beneden), ♀, $\times 2\frac{1}{2}$ (head wanting). (p. 160.)
2. *Pennella orthagorisci* E. P. Wright, ♀, about natural size (head wanting). (p. 150.) (Thomas Edward's specimen.)
3. *Sphyrion lumpi* (Kröyer), ♀, \times about 2. (p. 164.)
4. A smaller specimen, rather imperfect, \times about 4.
5. *Rebelula edwardsi* (Köl liker), ♀, \times about 2 (head wanting). (p. 162.)
6. *Thersitina gasterostei* (Pagenstecher), ♀, $\times 27$. (p. 42.)
7. *Clavella lophii* (M. Edwards), ♀, $\times 2$. (p. 226.)

(All the figures shew dorsal view.)

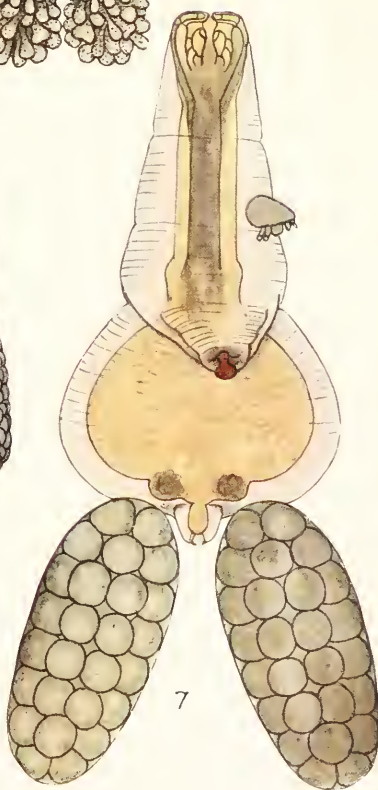
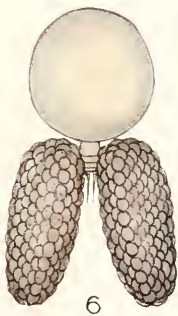
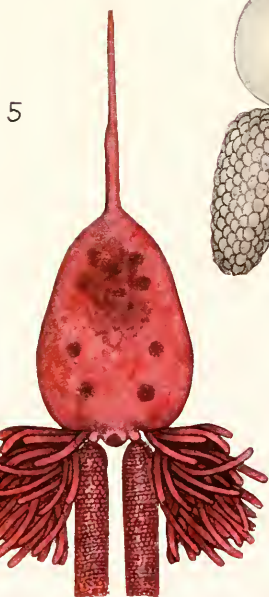
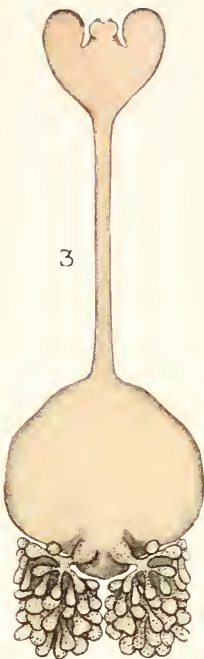
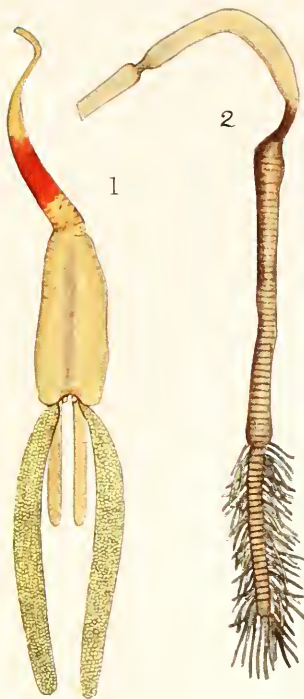


PLATE LII.

FIGS.

1-3. *Chondracanthus nodosus* (O. F. Müller). (p. 176.)

1. Adult female, dorsal view, $\times 8\frac{1}{2}$.

2. A young specimen, dorsal view, \times about 9.

3. An adult male, side view, $\times 80$.

4. *Chondracanthus lophii* Johnston, ♀, \times above 5. (p. 179.)

5. *Chondracanthus cornutus* (O. F. Müller), ♂, side view,
 \times about 100. (p. 168.)

6. *Medesicaste asellinum* (Linn.), ♀ dorsal view, $\times 7\frac{1}{2}$.
(p. 184.)

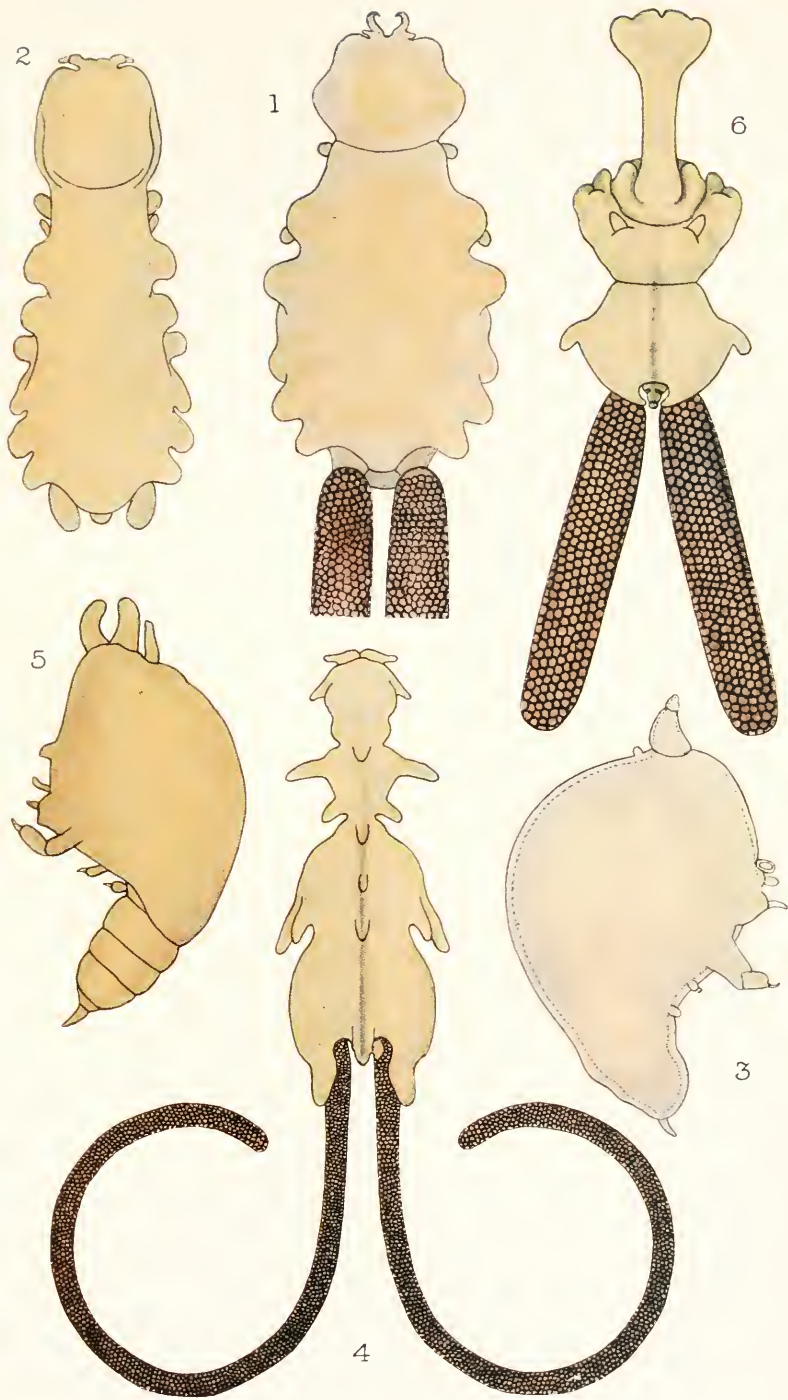


PLATE LIII.

FIGS.

- 1-4. *Chondracanthus cornutus* (O. F. Müller), ♀ & ♂.
 (p. 168.)
 1. ♀ Antennule.
 2. Mandible.
 3. ♂ Foot of first pair.
 4. Foot of second pair.
- 5-9. *Chondracanthus cornutus*, var., ♀ & ♂. (p. 169.)
 5. ♀ Antennule.
 6. Mandible.
 7. ♂ Antennule.
 8. Foot of first pair.
 9. Foot of second pair.
- 10, 11. *Chondracanthus fluræ* Kröyer, ♀. (p. 171.)
 10. Antennule.
 11. Mandible.
- 12-15. *Chondracanthus soleæ* Kröyer, ♀ & ♂. (p. 170.)
 12. ♀ Antennule.
 13. Mandible.
 14. ♂ Antennule.
 15. Foot of second pair.
- 16-19. *Chondracanthus merluccii* (Holten), ♀ & ♂. (p. 180.)
 16. ♀ Antennule.
 17. Mandible.
 18. ♂ Foot of first pair.
 19. Foot of second pair.

(Figures much enlarged.)

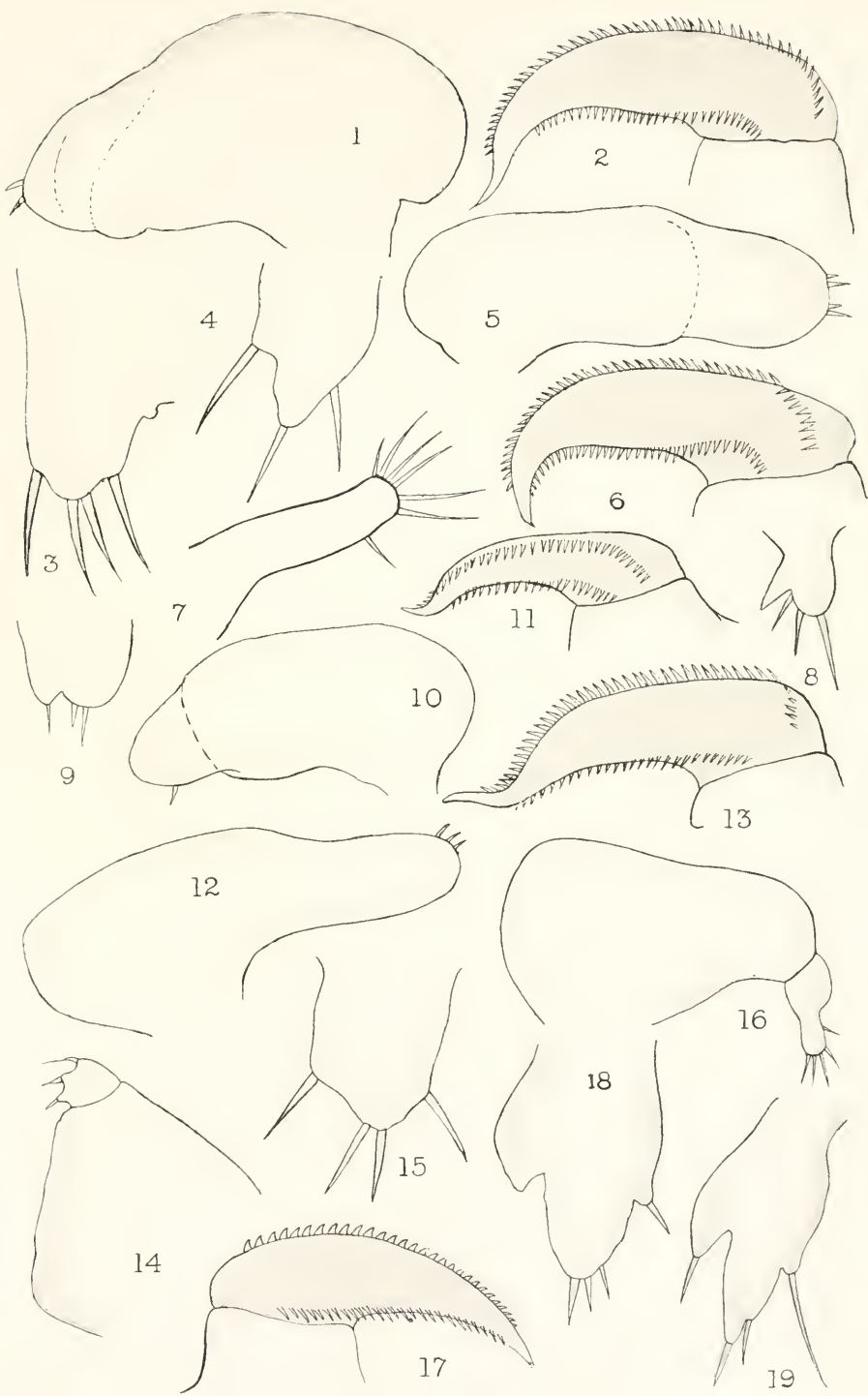


PLATE LIV.

FIGS.

- 1-11. *Trebius caudatus* Kröyer, ♀. (p. 81.)
1. Antennule.
 2. Antenna.
 3. Mandible.
 4. Maxilla.
 5. Sternal fork.
 6. First maxilliped.
 7. Second maxilliped.
 8. Foot of first pair.
 9. Foot of second pair.
 10. Foot of fourth pair.
 11. Fifth foot.
- 12-17. *Charopinus dalmanni* (Retzius), ♀ & ♂. (p. 189.)
12. ♀ Antennule.
 13. Antenna.
 14. Mandible.
 15. Maxilla.
 16. First maxilliped.
 17. ♂ Second maxilliped.
- 18-22. *Charopinus ramosus* Kröyer, ♀. (p. 191.)
18. Antennule.
 19. Antenna.
 20. Mandible.
 21. Maxilla.
 22. First maxilliped.

(Figures much enlarged.)

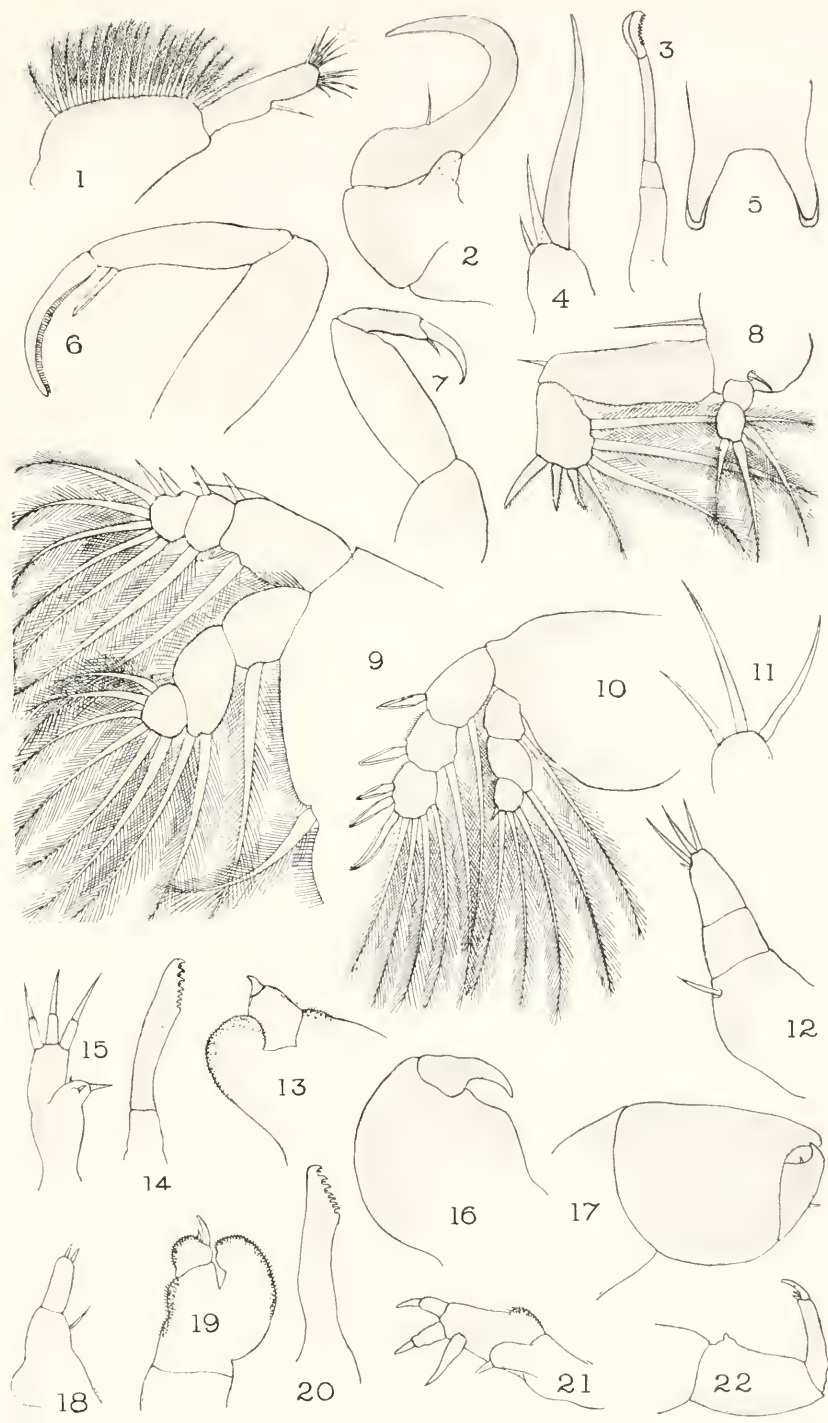


PLATE LV.

FIGS.

- 1-4. *Charopinus dalmanni* (Retzius). (p. 189.)
 1. Female, dorsal view, $\times 2$.
 2. Female, side view, $\times 2$.
 3. Ends of the second maxillipeds, slightly enlarged.
 4. Male, side view, $\times 36$.
5. *Charopinus dubius* T. Scott, ♀, dorsal view, $\times 3\frac{1}{2}$.
(p. 190.)
- 6, 7. *Charopinus ramosus* Kröyer, ♀. (p. 191.)
 6. Dorsal view, $\times 4$.
 7. Side view, $\times 4$.

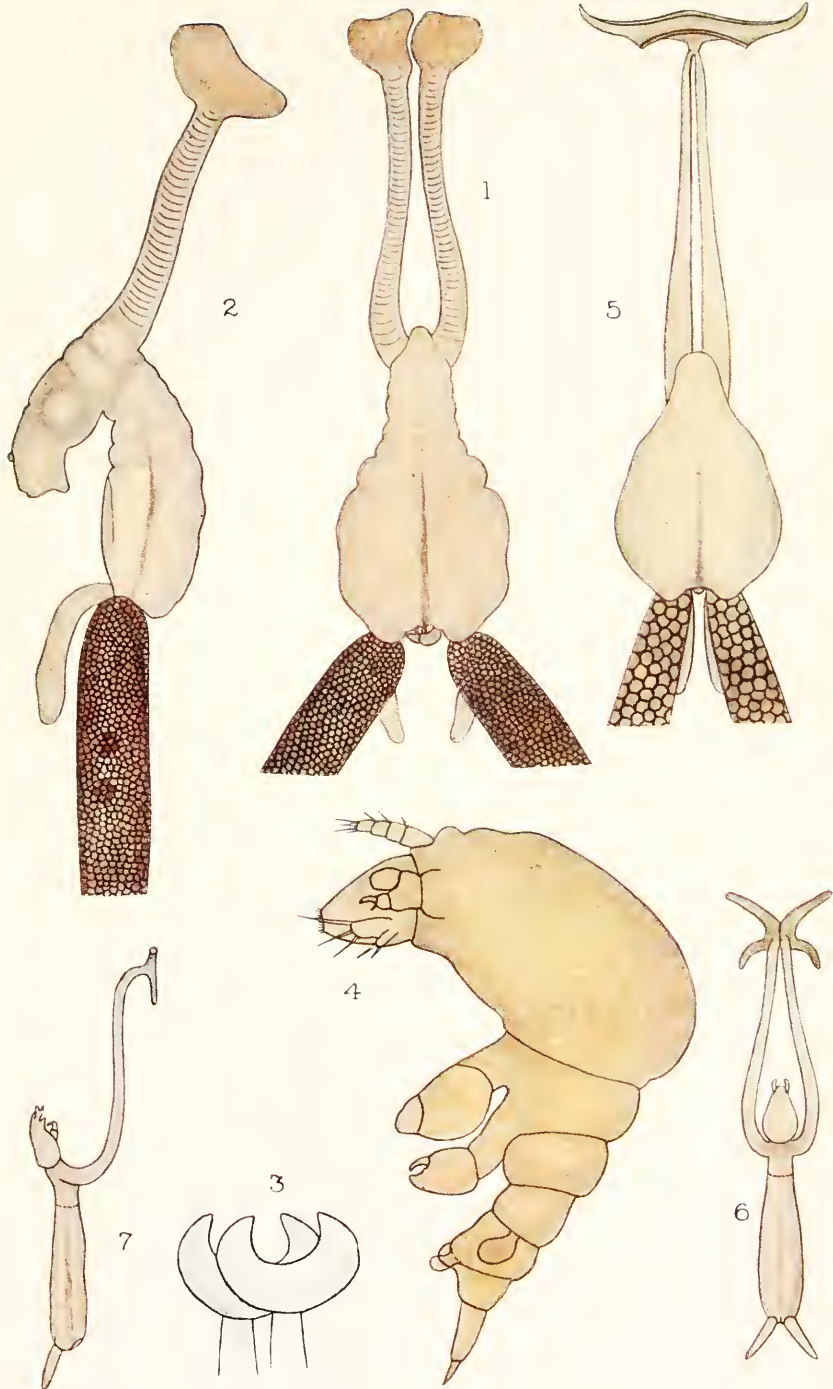


PLATE LVI.

FIGS.

- 1-4. *Chondracanthus depressus* T. Scott, ♀. (p. 172.)
1. Antennule.
2. Mandible.
3. Foot of first pair.
4. Foot of second pair.
- 5-7. *Chondracanthus depressus*, var. *oblongus*, ♀. (p. 173.)
5. Antennule.
6. Foot of first pair.
7. Foot of second pair.
- 8-10. *Chondracanthus annulatus* Olsson, ♀ & ♂. (p. 169.)
8. ♀ Antennule.
9. Mandible.
10. ♂ Antennule.
- 11, 12. *Chondracanthus limandæ* Kröyer, ♀. (p. 174.)
11. Antennule.
12. Mandible.
13. *Chondracanthus zeii* De la Roche, ♀. Antennule.
(p. 177.)
- 14, 15. *Chondracanthus clavatus* Bassett-Smith, ♀. (p. 175.)
14. Antennule.
15. Mandible.
- 16-18. *Chondracanthus lophii* Johnston, ♀. (p. 179.)
16. Antennule.
17. Mandible.
18. Maxilla.

(Figures much enlarged.)

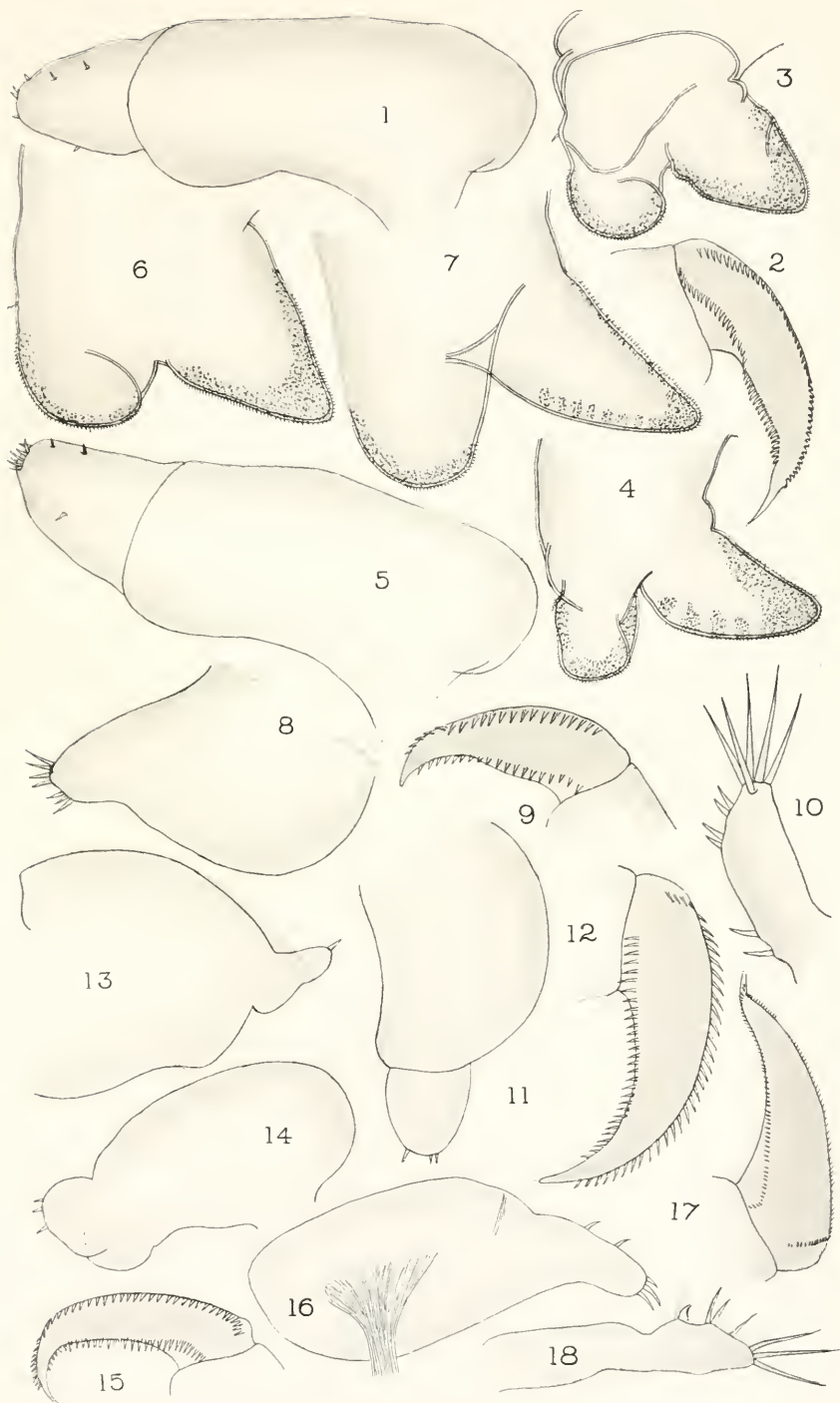


Plate 57

PLATE LVII.

FIGS.

- 1-7. *Lernæopoda cluthæ* T. Scott, ♀ & ♂. (p. 198.)
1. ♀ Antennule.
2. Antenna.
3. Mandible.
4. Maxilla.
5. First maxilliped.
6. ♂ First maxilliped.
7. Second maxilliped.
- 8-12. *Lernæopoda bidiscalis* W. F. de Visme Kane, ♀.
(p. 200.)
8. Antennule.
9. Antenna.
10. Mandible.
11. Maxilla.
12. First maxilliped.
- 13-17. *Lernæopoda elongata* (Grant), ♀. (p. 195.)
13. Antennule.
14. Antenna.
15. Mandible.
16. Maxilla.
17. First maxilliped.
- 18, 19. *Medesicaste usellinum* (Linn.), ♀. (p. 184.)
18. Antennule.
19. Mandible.

(Figures much enlarged.)

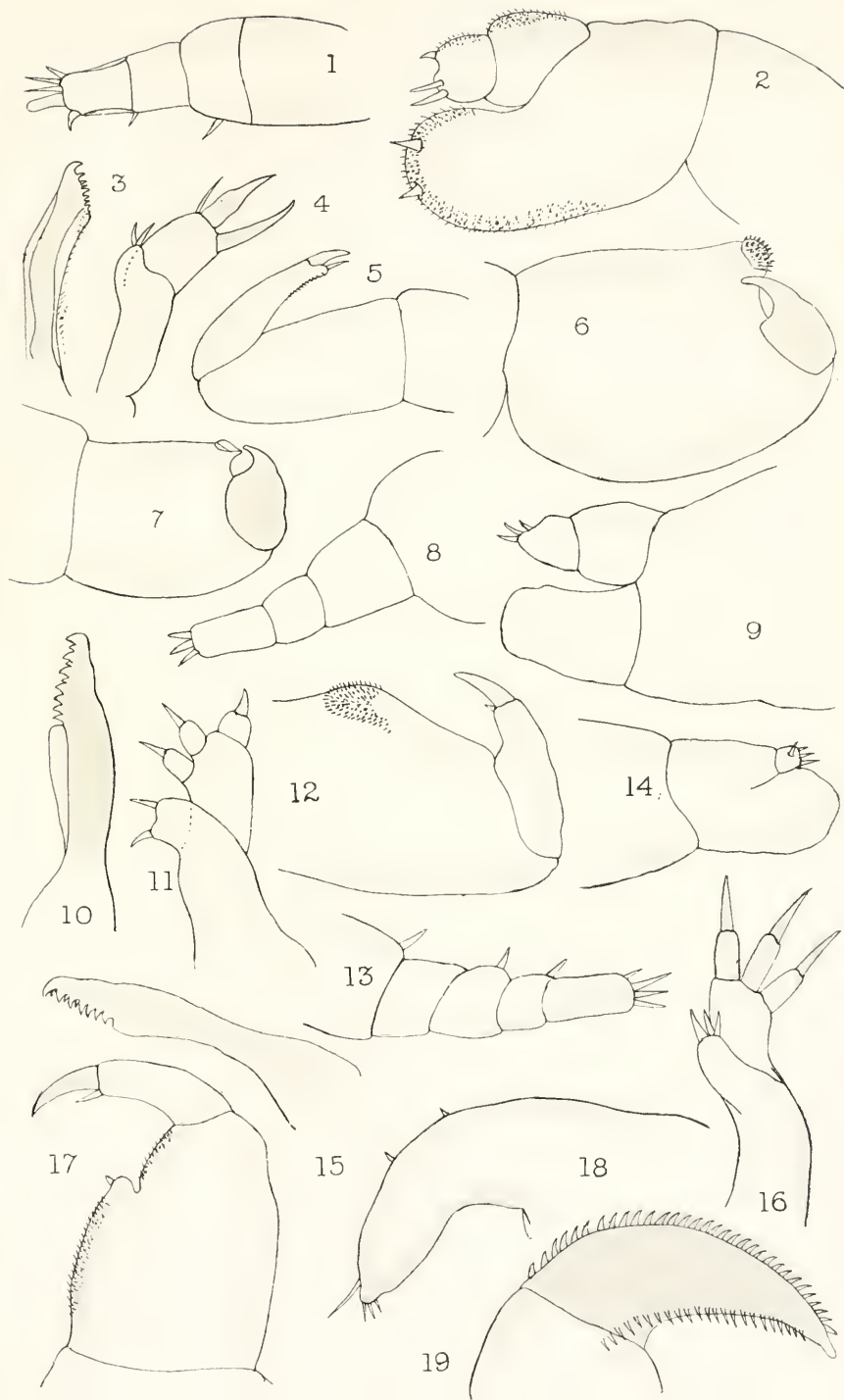


PLATE LVIII.

FIGS.

- 1-8. *Pandarus bicolor* Leach, ♂ (juv.), (= *Nogagus latus* T. Scott). (p. 95.)
1. Antennule.
 2. Antenna.
 3. First maxilliped.
 4. Second maxilliped.
 5. Foot of first pair.
 6. Foot of second pair.
 7. Foot of third pair.
 8. Foot of fourth pair.
- 9-15. *Lernæopoda galei* Krøyer, ♀ & ♂. (p. 197.)
9. ♀ Antennule.
 10. Antenna.
 11. Mandible.
 12. Maxilla.
 13. First maxilliped.
 14. Second maxilliped.
 15. ♂ Second maxilliped.
16. *Lernæopoda cluthæ* T. Scott, ♂. (p. 198.)
16. Abdomen and caudal furca.

(Figures much enlarged.)

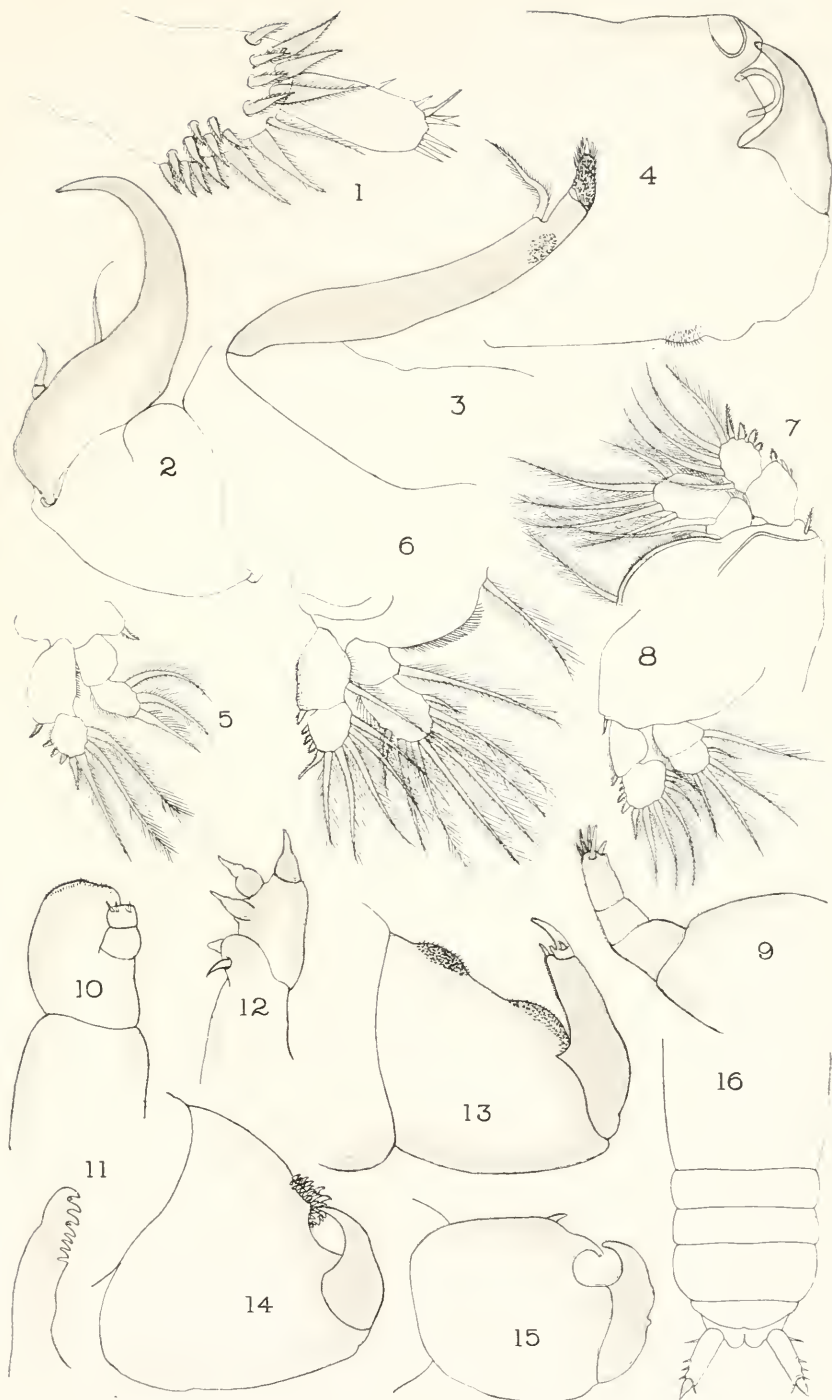


PLATE LIX.

FIGS.

1-6. *Lernæopoda salmonea* (Linn.). (p. 199.)

1. Female, dorsal view, $\times 12$.

2. The same, side view, $\times 12$.

3. Another specimen, ♀ adult, dorsal view, $\times 8$ (to shew variation).

4. The same, seen from the side, $\times 8$.

5. A female, somewhat immature, dorsal view, enlarged.

6. The same, seen from the side, enlarged.

7, 8. *Achtheres percarum* Nordmann, ♀. (p. 193.)

7. Dorsal view, much enlarged.

8. The same, seen from the side.

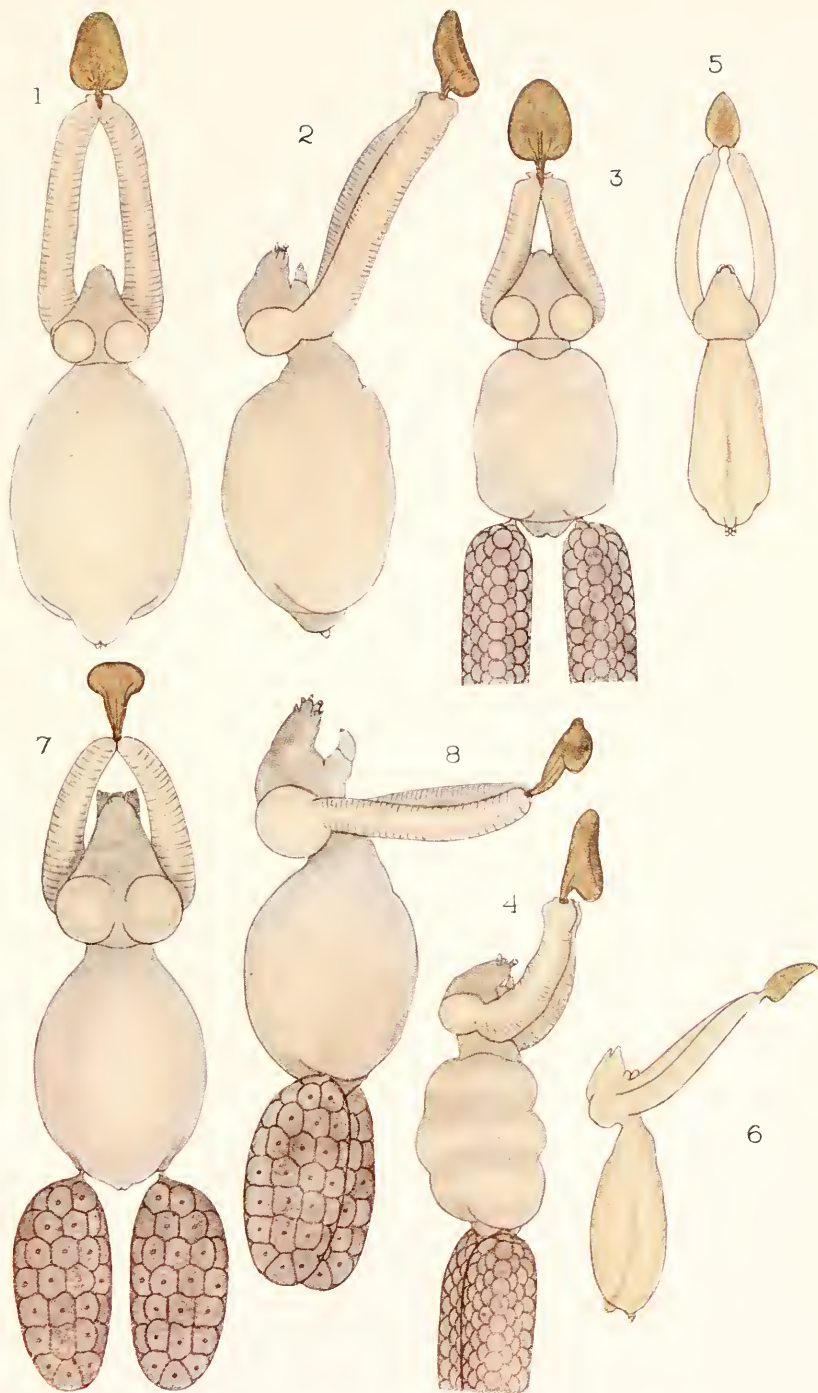


Plate 60

PLATE LX.

FIGS.

- 1-3. *Lernæopoda cluthæ* T. Scott. (p. 198.)
 1. Female, dorsal view, \times 8.
 2. The same, seen from the side, \times 8.
 3. Male, seen from the side, \times about 50.
- 4-6. *Lernæopoda galei* Kröyer. (p. 197.)
 4. Female dorsal view, \times 4.
 5. The same, seen from the side, \times 4.
 6. Male, seen from the side, \times about 50.
7. *Brachiella ovalis* (Kröyer), seen partly from the side,
 \times about 12. (p. 210.)

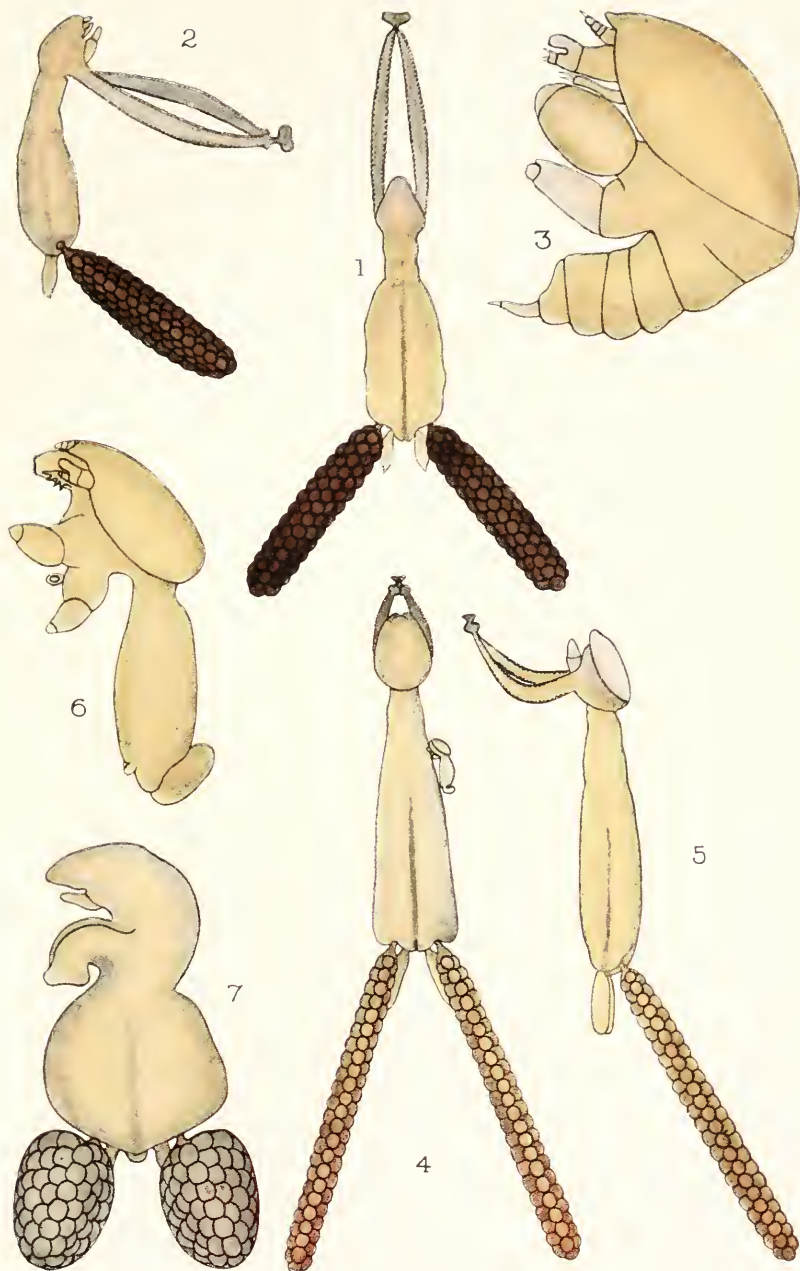


PLATE LXI.

FIGS.

- 1, 2. *Lernæopoda bidiscalis* W. F. de Visme Kane. (p. 200.)
1. Female, dorsal view, \times about 6.
2. The same, seen from the side, \times about 6.
3, 4. *Lernæopoda elongata* (Grant). (p. 195.)
3. Female, dorsal view, \times 2·3.
4. The same, seen from the side, \times 2·3.
5, 6. *Lernæopoda similis* sp. n. (p. 202.)
5. Female, dorsal view, \times 10½.
6. The same, seen from the side, \times 10½.

Note.—Vol. I, p. 195, for Plate LXI, figs. 5, 6; read figs. 3, 4; and page 202, for Plate LXI, figs. 3, 4; read figs. 5, 6.

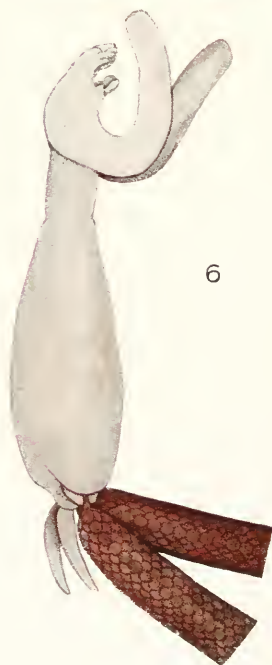
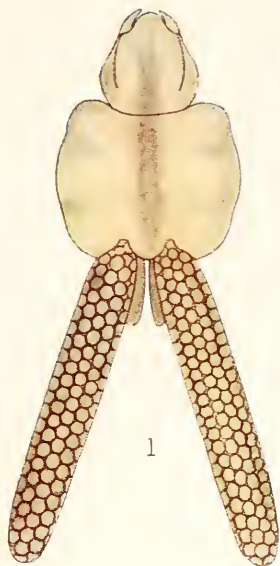


Plate 62

PLATE LXII.

FIGS.

1. *Brachiella trigla* Claus, ♀, ventral aspect, × 20.
(p. 209.)
2. *Brachiella insidiosa* Heller, ♀, side view, × 5.
(p. 206.)
3. *Brachiella rostrata* Kröyer, ♀, side view, × 5. (p. 205.)
- 4, 5. *Brachiella merluccii* Bassett-Smith, ♀, × 6. (p. 207.)
 4. Dorsal view.
 5. Side view.

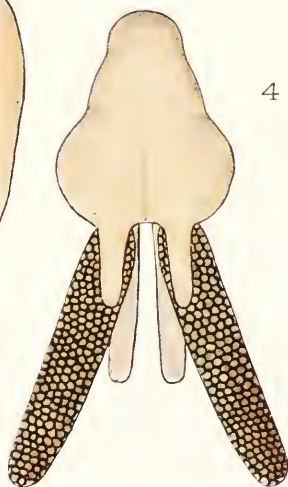
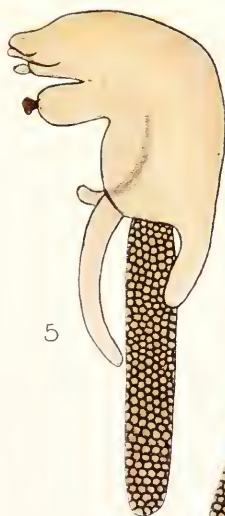
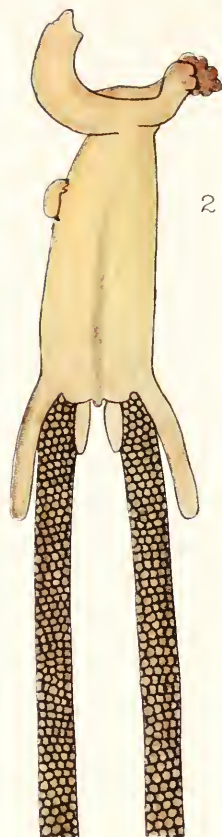
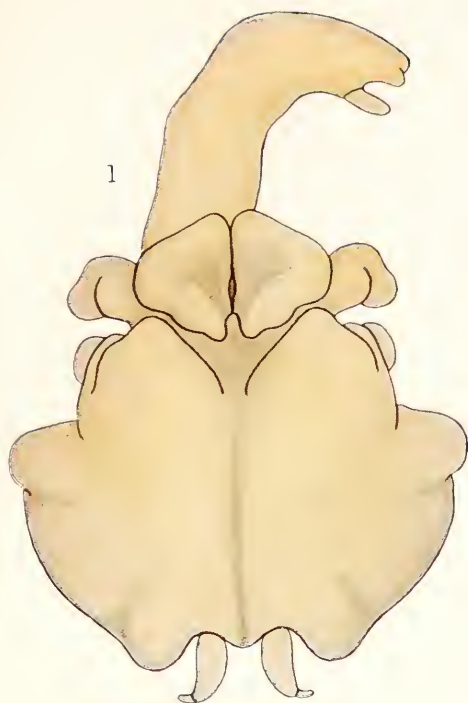


Plate 63

PLATE LXIII.

FIGS.

1. *Lernæopoda galei* Kröyer, ♂, abdomen and caudal furca, $\times 26$. (p. 197.)
- 2-8. *Brachiella rostrata* Kröyer, ♀ & ♂. (p. 205.)
 2. ♀ Antennule.
 3. Antenna.
 4. Mandible.
 5. Maxilla.
 6. First maxilliped.
 7. ♂ First maxilliped.
 8. Second maxilliped.
- 9-16. *Brachiella insidiosa* Heller, ♀ & ♂. (p. 206.)
 9. ♀ Antennule.
 10. Antenna.
 11. Mandible.
 12. Maxilla.
 13. First maxilliped.
 14. ♂ Antenna.
 15. First maxilliped.
 16. Second maxilliped.
- 17-20. *Brachiella merluccii* Bassett-Smith, ♀. (p. 207.)
 17. Antennule.
 18. Mandible.
 19. Maxilla.
 20. First maxilliped.
- 21-25. *Brachiella triglæ* Claus, ♀. (p. 209.)
 21. Antennule.
 22. Antenna.
 23. Mandible.
 24. Maxilla.
 25. First maxilliped.
- 26-30. *Brachiella ovalis* (Kröyer), ♀. (p. 210.)
 26. Antennule.
 27. Antenna.
 28. Mandible.
 29. Maxilla.
 30. First maxilliped.

(Figures much enlarged.)

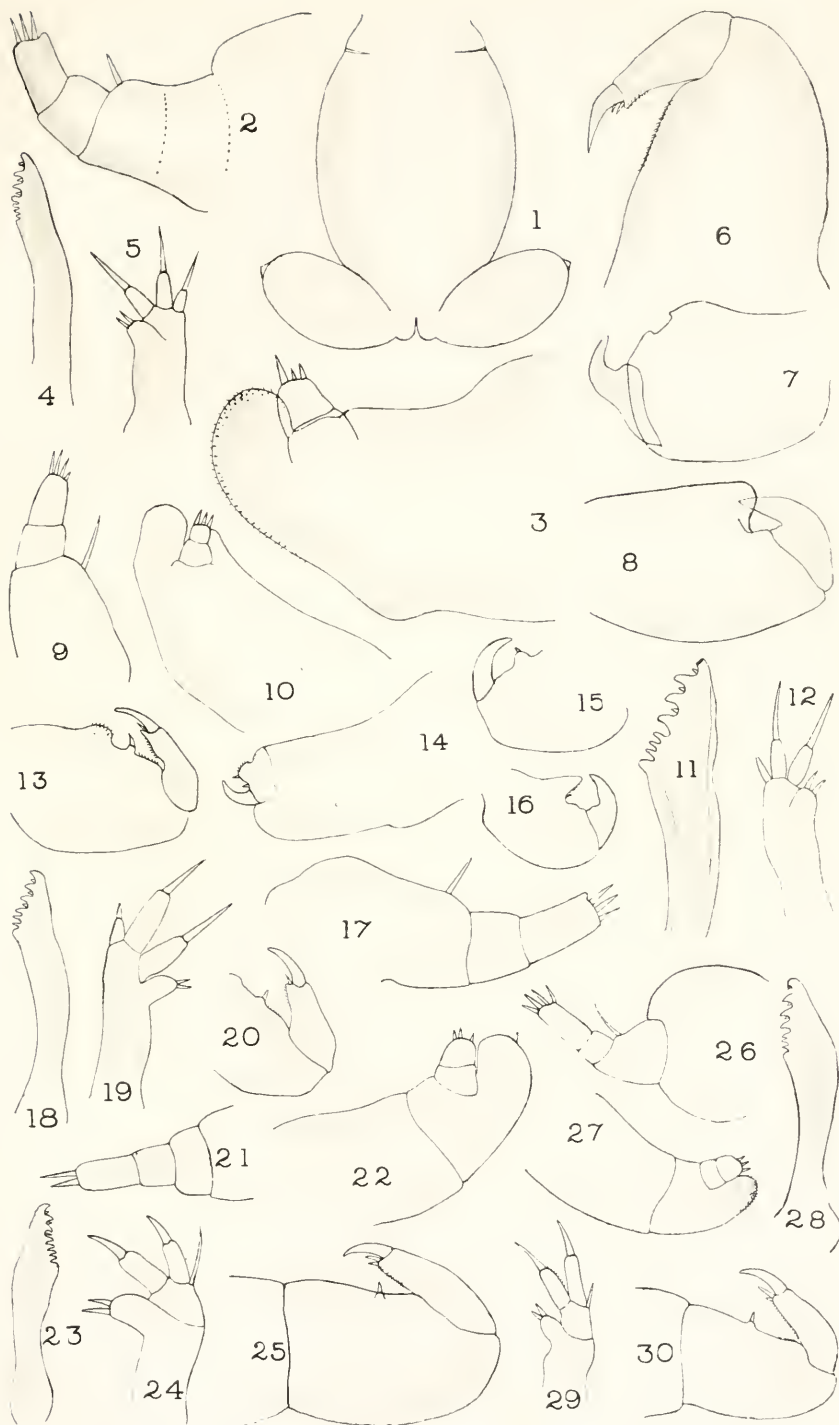


PLATE LXIV.

FIGS.

- 1-3. *Achtheres percarum* Nordmann, ♀. (p. 193.)
1. Anterior end, ventral aspect, shewing mouth-appendages.
2. First maxillipeds, side view.
3. Second maxilliped, side view.
4-6. *Brachiella thynni* Cuvier. (p. 204.)
4. Male, seen from the side, $\times 30$.
5. Female, scarcely mature, head wanting, slightly enlarged.
6. Female, adult, \times about 3.
7. *Brachiella parkeri* G. M. Thomson, ♀, $\times 3\frac{1}{2}$. (p. 212.)
8. *Brachiella pastinacæ* P. J. van Beneden, ♀, $\times 10$. (p. 211.)
9. *Brachiella bispinosa* Nordmann, ♀, $\times 7$, side view; after Nordmann. (p. 211.)
(Figs. 1-3 and 9 after Nordmann; 4-6 after Steenstrup & Lütken; 7 and 8 after Miss Bainbridge.)

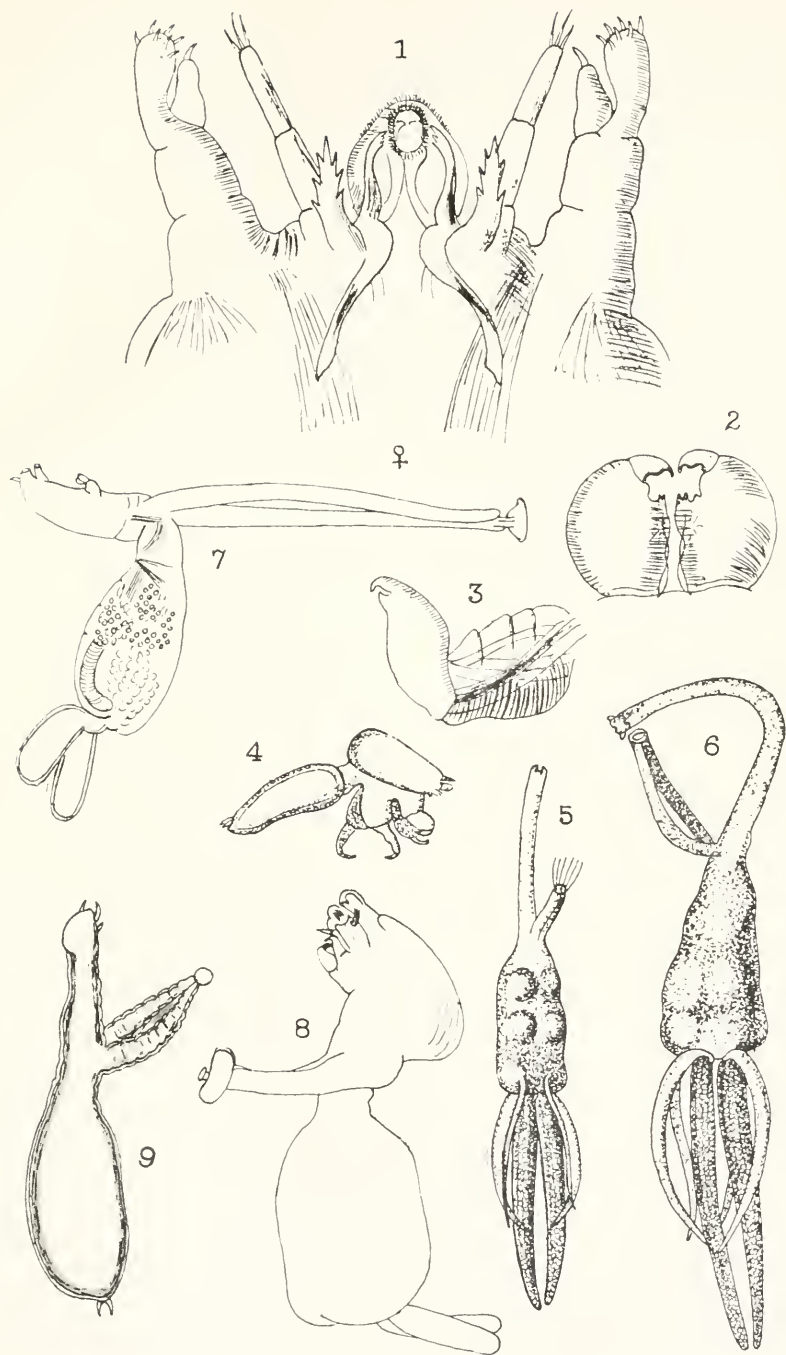


Plate 65

PLATE LXV.

FIGS.

1. *Clavella brevicollis* (M. Edwards), ♀, side view, × about 20. (p. 220.)
- 2, 3. *Clavella uncinata* (O. F. Müller). (p. 214.)
 2. ♀, Side view, × about 7.
 3. ♂, Side view, × about 45.
4. *Clavella rugosa* (Kröyer), ♀, side view, × $4\frac{1}{2}$. (p. 216.)
A male is shewn attached to the cephalothorax.
5. *Clavella rugosa* (Kröyer), ♂, side view, × about 40.
6. *Clavella* (?) *uncinata*, ♀ (juv.), with two males attached to the abdomen, enlarged. (p. 214.)
7. *Clavella dubia*, T. & A. Scott, ♀, side view, × 7. (p. 217.)
- 8, 9. *Clavella stellata* (Kröyer), ♀. (p. 220.)
 8. Side view, shewing a section of the scale of the fish to which the adhesive disk of the *Clavella* is attached, × $4\frac{1}{2}$.
 9. Adhesive disk, enlarged.

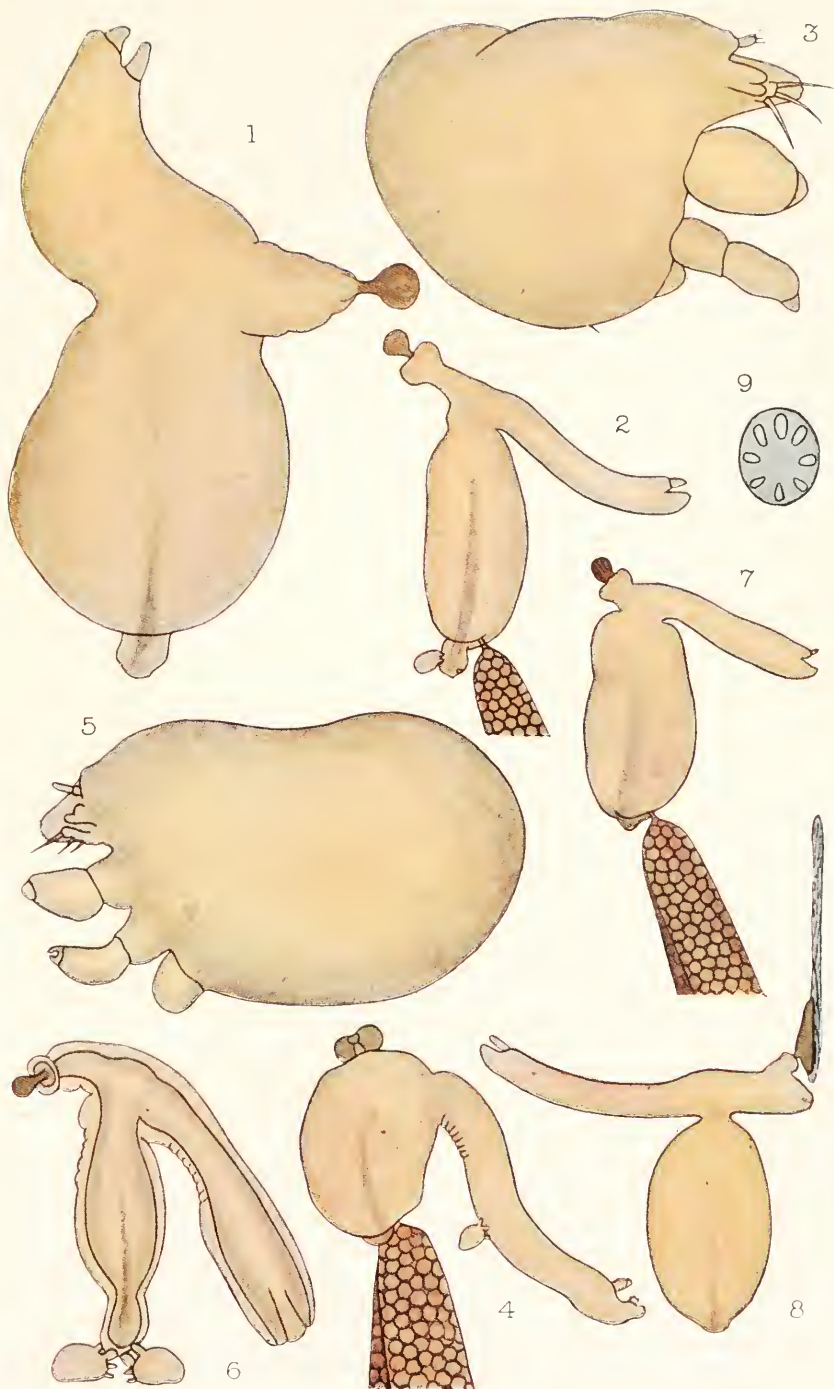


PLATE LXVI.

FIGS.

- 1-7. *Clavella rugosa* (Kröyer), ♀ & ♂. (p. 216.)
1. ♀ Antennule.
2. Antenna.
3. Mandible.
4. Maxilla.
5. First maxilliped.
6. ♂ First maxilliped.
7. Second maxilliped.
- 8-11. *Clavella dubia* T. & A. Scott, ♀. (p. 217.)
8. Antennule.
9. Mandible.
10. Maxilla.
11. First maxilliped.
- 12-16. *Clavella brevicollis* (M. Edwards), ♀. (p. 220.)
12. Antennule.
13. Antenna.
14. Mandible.
15. Maxilla.
16. First maxilliped.
- 17-20. *Clavella emarginata* (Kröyer), ♀. (p. 218.)
17. Antennule.
18. Mandible.
19. Maxilla.
20. First maxilliped.
- 21-23. *Clavella uncinata* (O. F. Müller), ♀. (p. 214.)
21. Antennule.
22. Maxilla.
23. First maxilliped.

(Figures much enlarged.)

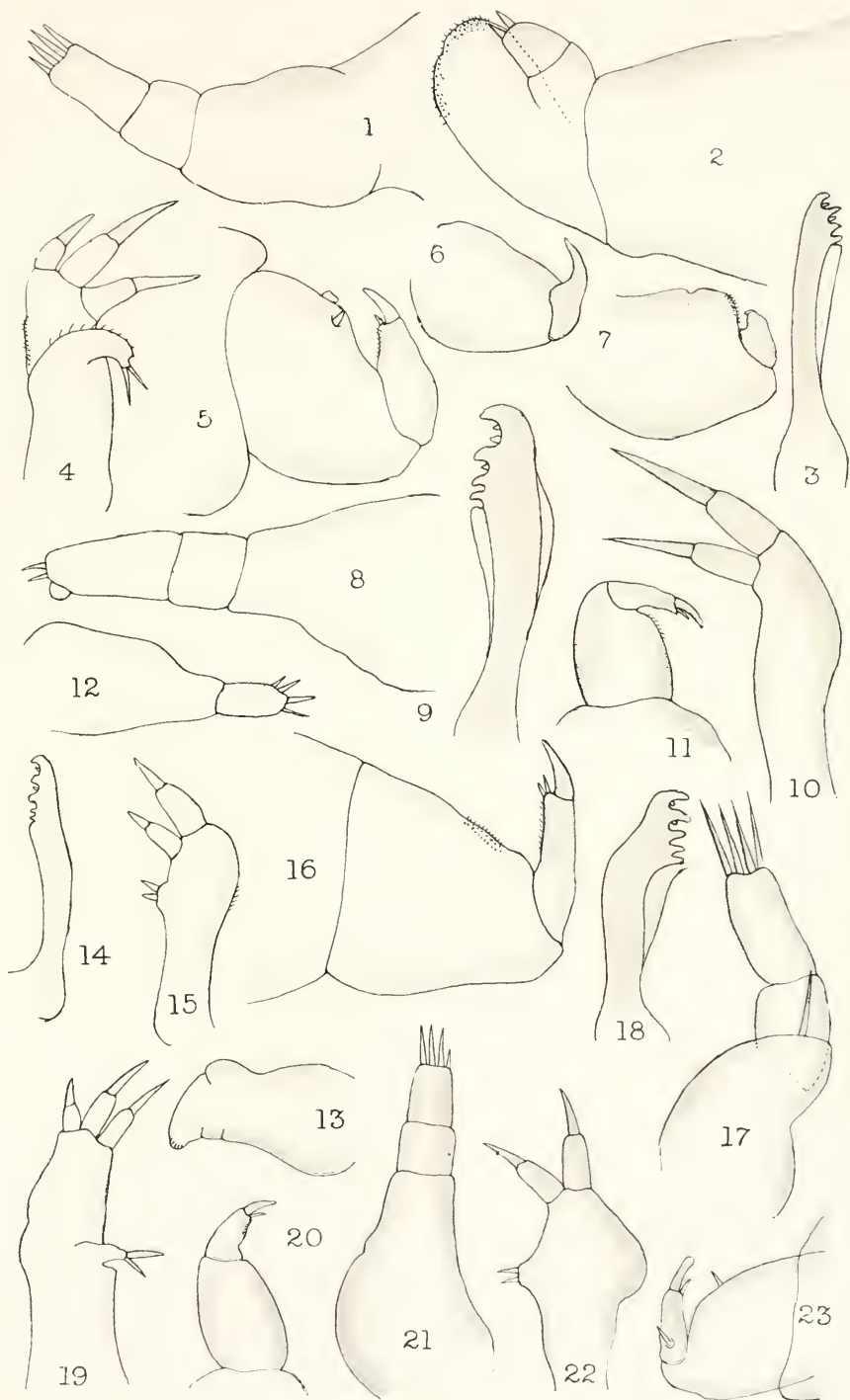


PLATE LXVII.

FIGS.

- 1-3. *Clavella scombri* (Kurz). (p. 218.)
1. Female, side view, \times 12. A male is shewn attached to the cephalothorax.
 2. Female, *in situ* on gill-arch of fish, \times about 4.
 3. Male, side view, \times 56.
- 4-6. *Clavella paradoxa* (P. J. van Beneden). (p. 222.)
4. Female, dorsal view, \times about 20.
 5. Female, *in situ* on gill-filament of fish, \times 5.
 6. Male, side view, \times 25.
-

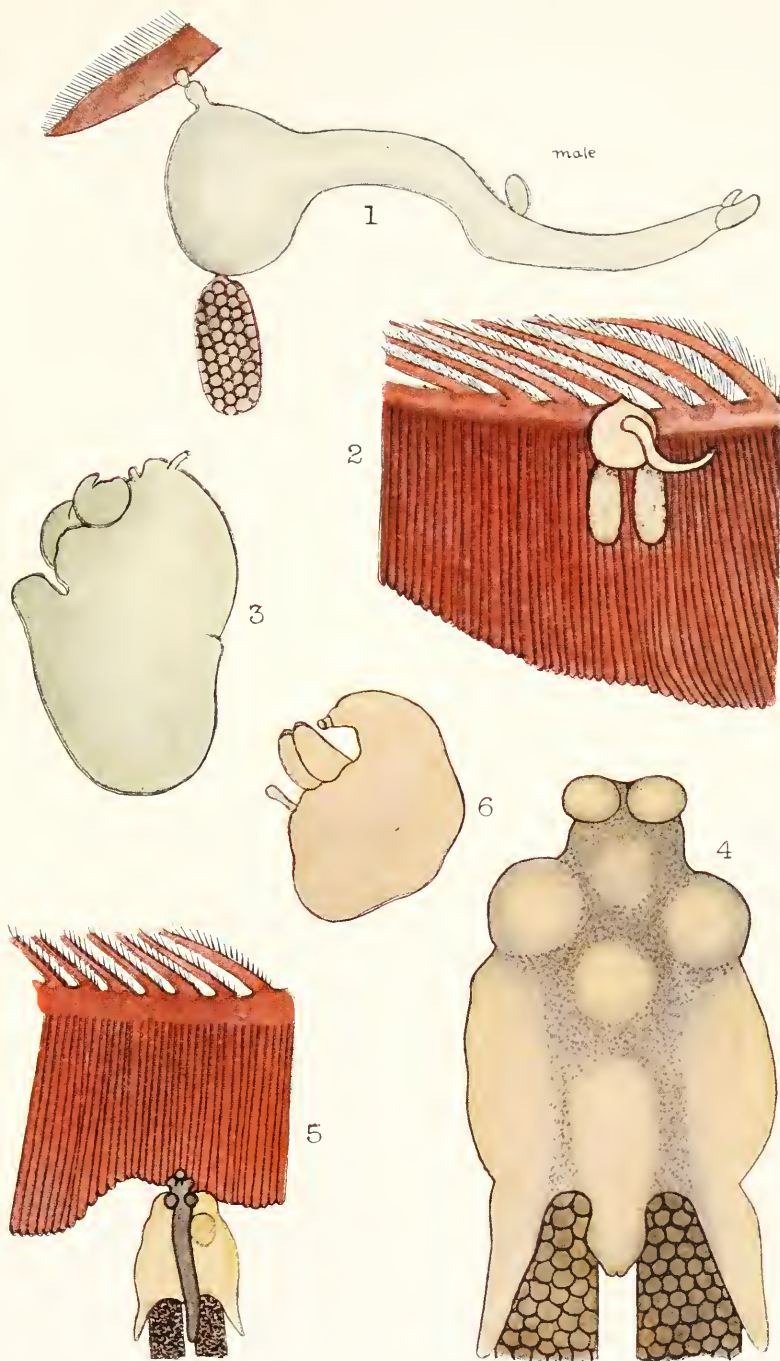


Plate 68

PLATE LXVIII.

FIGS.

- 1-7. *Clavella scombri* (Kurz), ♀ & ♂. (p. 218.)
1. ♀ Antennule.
2. Antenna.
3. Mandible, apex shewing serrated edge.
4. Maxilla.
5. First maxilliped.
6. ♂ First maxilliped.
7. Second maxilliped.
8-14. *Clavella paradoxa* (P. J. van Beneden), ♀ & ♂. (p. 222.)
8. ♀ Antennule.
9. Antenna.
10. Mandible, apex shewing serrated edge.
11. Maxilla.
12. First maxilliped.
13. ♂ First maxilliped.
14. Second maxilliped.
15. *Clavella quadrata* Bassett-Smith, ♀, enlarged (after Bassett-Smith). (p. 223.)

(Figures much enlarged.)

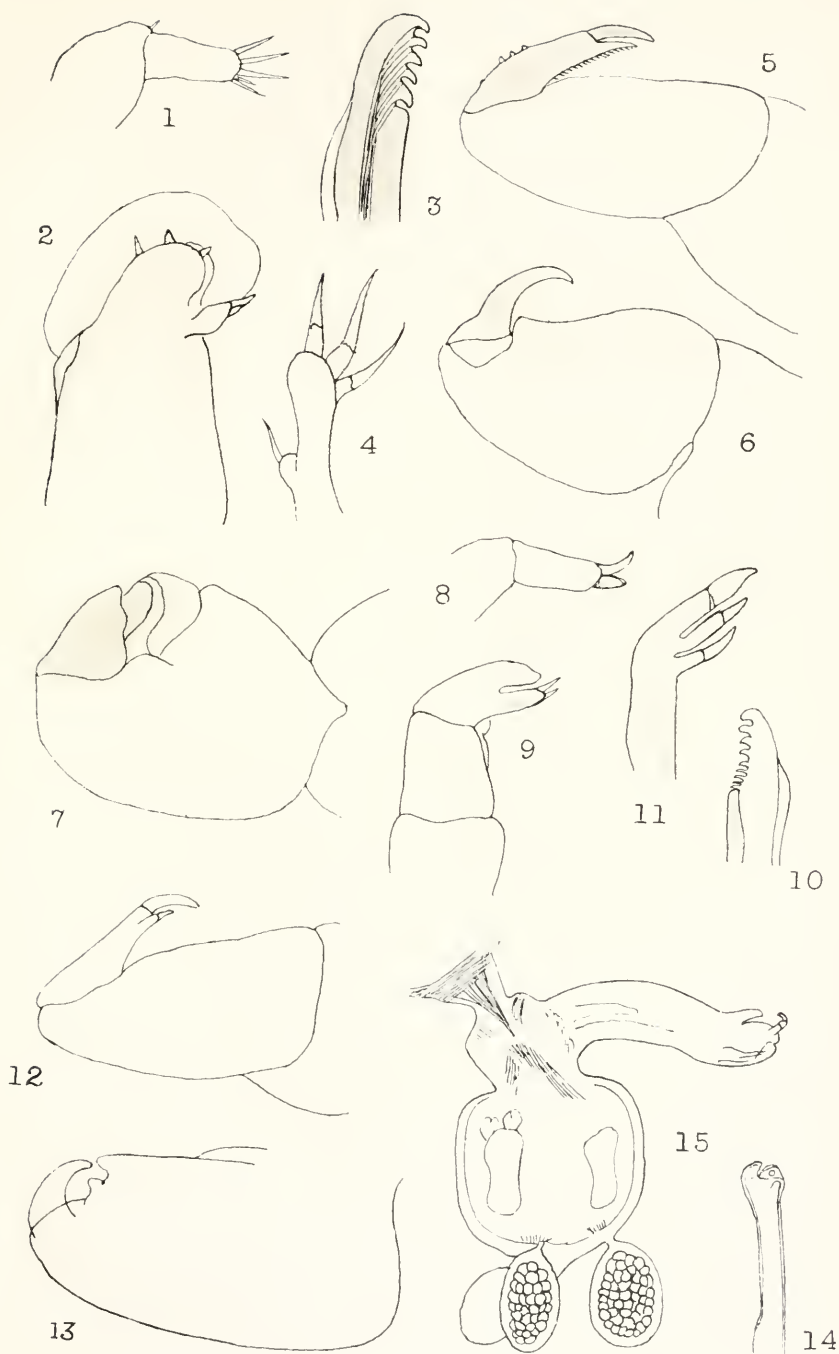


Plate 69



PLATE LXIX.

FIGS.

- 1-3. *Clavella canthari* (Heller). (p. 224.)
 1. Female, dorsal view, $\times 9\cdot3$.
 2. The same, seen from the side, $\times 9\cdot3$.
 3. Male, seen from the side, \times about 50.
- 4-6. *Clavella alata* Brian. (p. 225.)
 4. Female, dorsal view, $\times 15$.
 5. The same, seen from the side, $\times 15$.
 6. Male, seen from the side, \times about 50.
7. *Clavella emarginata* (Kröyer) ♀, side view, \times about 13. (p. 218.)

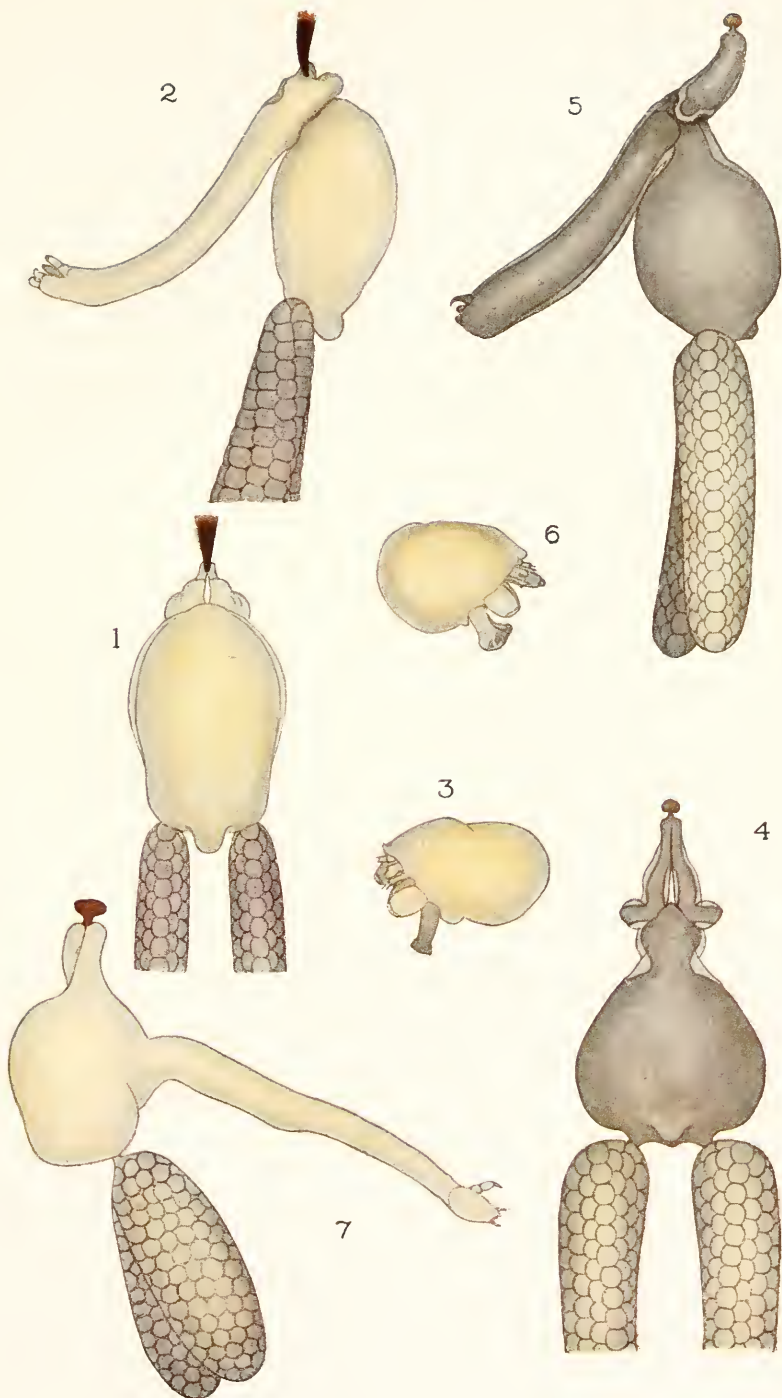


Plate 70

PLATE LXX.

FIGS.

- 1-13. *Kroyeria lineata* P. J. van Beneden. (p. 121.)
1. Female, dorsal view, \times about 24.
 2. Antennule.
 3. Antenna.
 4. Mandible.
 5. Maxilla.
 6. First maxilliped.
 7. Second maxilliped.
 8. Foot of first pair.
 9. Foot of second pair.
 10. Part of genital segment, and abdomen seen from the side.
 11. One of the cephalic spines.
 12. Male, dorsal view, \times about 24.
 13. One of the cephalic spines.

(Figures 2-11 and 13 greatly enlarged.)

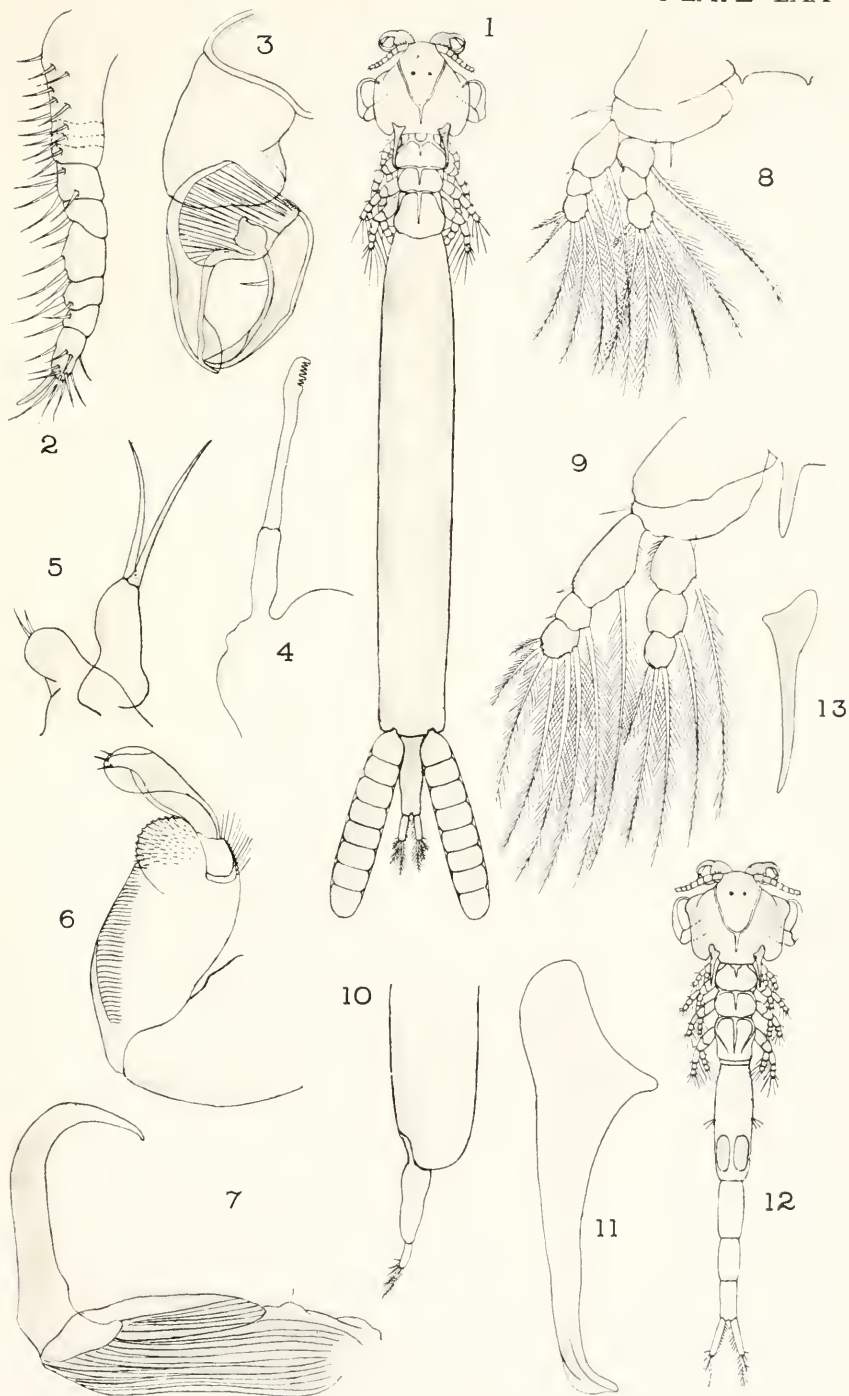


Plate 71

PLATE LXXI.

FIGS.

1-12. *Eudactylina insolens* sp. n., ♀. (p. 135.)

1. Dorsal view, $\times 50$.

2. Side view, $\times 50$.

3. Antennule.

4. Antenna.

5. Mandible.

6. Maxilla.

7. First maxilliped.

8. Second maxilliped.

9. Foot of first pair.

10. Foot of second pair.

11. Foot of third pair.

12. Foot of fourth pair.

13. *Brachiella pastinaca* P. J. van Beneden, ♀, side view,
 $\times 10$. (p. 211.)

14. *Caligus pelamydis* Kröyer, ♂, dorsal view, $\times 24$. (p.
58.)

(Figures 3-12 greatly enlarged.)

Note.—Fig. 13 is not referred to in the text, as the specimen
was only recently obtained.

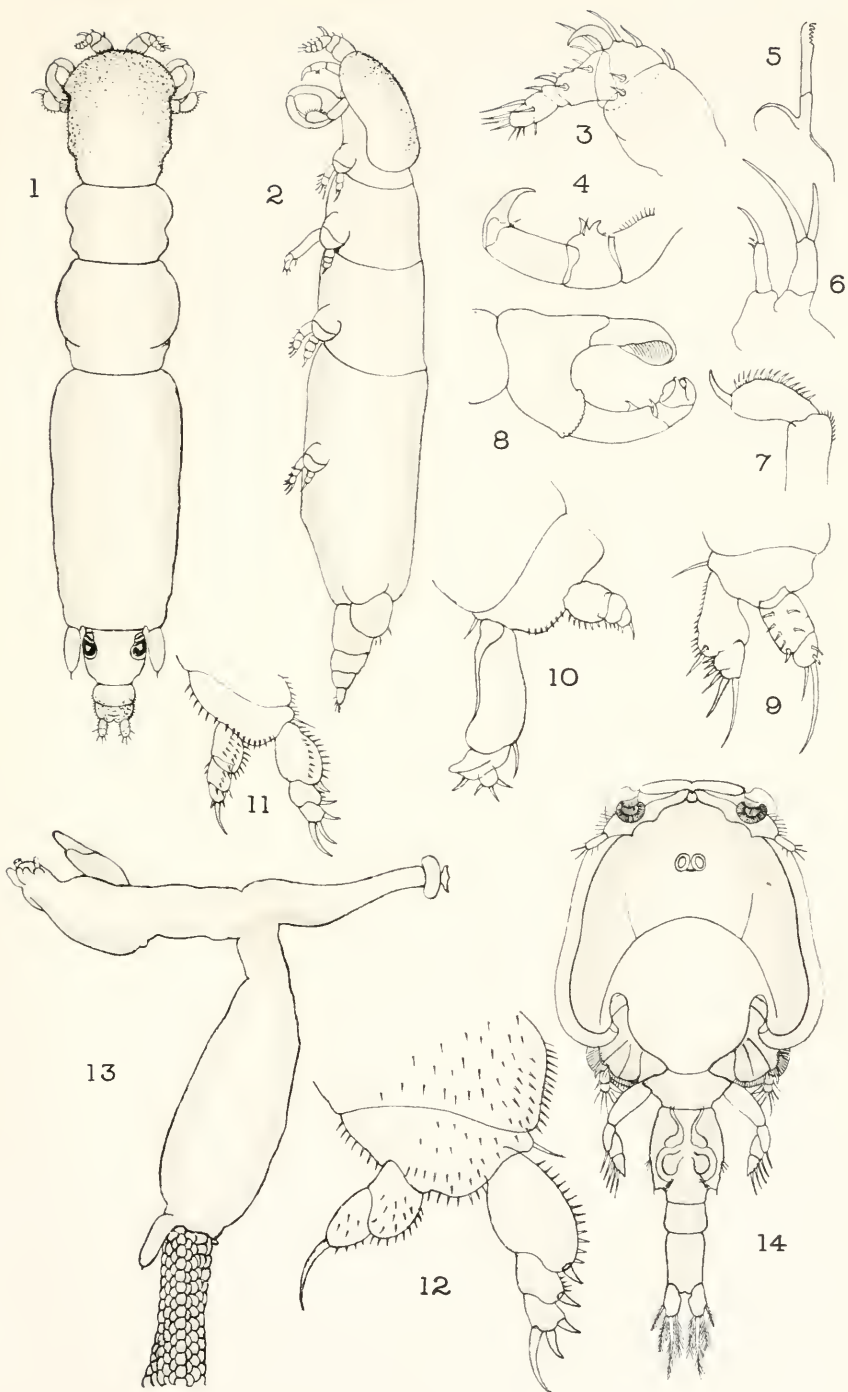


Plate 72

PLATE LXXII.

FIGS.

1-10. *Argulus foliaceus* (Linn.), ♀. (p. 227.)

1. Female, dorsal view, enlarged about $6\frac{1}{2}$ times.
2. Antenna.
3. Antennule.
4. Mouth, side view.
5. Siphon with retractile stylet.
6. Second maxilliped.
7. First swimming foot.
8. Basiopodite of second foot.
9. Basiopodite of third foot.
10. Basiopodite of fourth foot.

(Figures 2-10 much enlarged.)



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